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West Europe Report

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WEST EUROPE REPORT

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POLITICAL

/9317

CONSTITUTIONALIST FAVORS RECOGNITION OF TRNC

Istanbul MILLIYET in Turkish 15 Nov 86 p 2

[Article by Mumtaz Soysal: "Great and Small"]

[Text] Today is the third anniversary of the establishment of the Turkish Republic of Northern Cyprus.

Or, more correctly, the third anniversary of the proclamation of its independence. The truth is that a Turkish Cypriot administration has held sway in that part of the island ever since 1975, or even before 1974. Independence is the act by which that administration shed such qualifications as "autonomous" or "federated" to assume the status of a state on its own.

But despite having all the attributes of a state, it is still a state not recognized by any country other than Turkey.

This lack of recognition does not affect its status as a state. And if the Cyprus problem stays suspended in its present state for some time to come, recognition by other states besides Turkey will come sooner or later. In this sense, lack of recognition is not as important an issue as is often thought.

On the other hand, it is very important to determine who is the real culprit in the nonrecognition, because therein lies the responsibility for leaving the Cyprus issue unsettled.

This is true for the following reasons: The transformation of Northern Cyprus into a state recognized at the international level is the only means of making Southern Cyprus give up the obstinacy and vain illusions it has clung to until now. Without such recognition, there can be no such renunciation or "sobering up." The Greek Cypriot side will continue tossing about, dreaming of a settlement not based on equality or even of one that will reduce the Turkish Cypriots to the status of a minority. As the Turkish side will never accede to this, the problem will remain unsolved. It follows, therefore, that he who hampers recognition is hampering a solution, too.

The party that is hampering recognition is the United States of America. It is the United States that prevented a series of decisions to recognize the

TRNC by threatening several countries, which were preparing to do so initially, with cutting off aid.

It is the same party that exploited the poverty of a poor country to make it retract its decision to recognize the TRNC.

Yet the very same America appears in the role of the state that wants a settlement in Cyprus most.

The claim that recognition would arouse great reaction on the Greek Cypriot side and would make a solution all the more difficult was a pretext that was hard to believe even at the beginning. Since then this pretext has lost all credibility: The lack of recognition for the TRNC has thoroughly spoiled Kiprianou and his supporters, made them cling more obstinately to their attitudes, and raised their hopes that something might come out of the long-term consequences of nonrecognition.

This is why claiming to favor a solution while not recognizing the TRNC will deceive nobody. All it can do is to lead to a wider circulation of the claims that "America wishes Turkey to have one more unsolved problem on its hands and thus make it, beset with problems, an easier target from which to extract what the United States wants."

There are other pretexts, too, but these are even less convincing.

How about the question of the size of the Northern Cyprus being "too small" to be considered a state?

Let us for a moment ignore European states such as the Vatican, Andorra, San Marino, Liechtenstein, and Monaco. There are states in other parts of the world so small that they make the TRNC, with a population of 160,000 and and area of over 3,000 square kilometers, look almost gigantic: the Caribbean Republic of Antigua and Barbuda, with a population of 80,000 and an area of 440 square kilometers, and the Dominican Republic, with a population of 70,000 and an area of 750 square kilometers.

And how about the Seychelles Republic, established in the islands where Makarios was once exiled? Its population is 65,000 and it covers 453 square kilometers.

And what is one to say about the Tavalu Republic in the southwest Pacific? Population 8,000, area 23 square kilometers.

Vanuatu, Nauru, Tonga, Western Samoa... a whole host of states one has never even heard of. All of them officially recognized, all of them members of the United Nations and each entitled to a vote as a state.

Is the pretext based on the fact that Northern Cyprus is being defended by the troops of another country? Then, how about the Belize Republic on the west coast of central America that is defended against Guatemala by a British unit of 2,000 men? If you like, we shall pass in silence over the

state of Grenada under American occupation--sorry, "protection"--with a population of 95,000 and an area of 345 square kilometers.

To rebut the pretexts one by one to expose the American reluctance on the subject of recognition is to get down to the crucial point in the Cyprus problem. As long as America sticks to this stand, the current initiative to create a fourth document [by the UN secretary general] indirectly is also doomed to failure.

Those who truly desire a solution of the Cyprus problem must recognize the right of the Turkish side to statehood as the essential symbol of equal status before any kind of initiative for partnership is undertaken.

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FOREIGN MINISTRY ANNOUNCES PERSONNEL CHANGES

Helsinki HELSINGIN SANOMAT in Finnish 30 Jan 87 p 10

[Article: "Changes in the Administration of Foreign Ministry in the Summer"]

[Text] The administration of the Ministry for Foreign Affairs will change early next summer when the undersecretary of state for administration, the chief of the administrative department and the inspector of embassies will change. These changes are part of the round of appointments of ambassadors, on which the president is expected to decide on Friday.

The present undersecretary of state for administration, Ulf-Erik Slotte, will be sent to Canberra, Australia, to act as ambassador, and the chief of the administrative department, Antti Hynninen, will be sent to Cairo, Egypt, to act as envoy. The new undersecretary of state will be Ossi Sunell, currently inspector of embassies, and the new inspector will be Mauri Eggert, currently envoy in Cairo.

The chief of the administrative department will be Holger Rotkirch, assistant chief of the judicial department. His position will be filled by Tom Gronberg, envoy in Nairobi.

Ilkka Ristimaki will move from Tanzania to Nairobi, Kenya.
Slotte's predecessor in Australia, Osmo Lares, will move to the Hague, Matti Hakkanen from the Hague will go to Buenos Aires, Argentina, and from there Esko Rajakoski will move to Helsinki to be a negotiating official.

Another negotiating official will be Hakan Krogius from Iraq and he will succeeded as envoy in Bagdad by Henry Soderholm from Paris. The envoy to Brazil, Pekka Korvenheimo, will also be appointed a negotiating official in Finland and Risto Kauppi, assistant department chief, will go to Brazil.

The last change of envoys in June concerns Cuba: Tero Lehtovaara will return to the ministry and Teppo Takala, office manager, will represent Finland in Havana.

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CPSU NORDIC SECTION CHANGING PERSONNEL

Helsinki HELSINGIN SANOMAT in Finnish 22 Jan 87 p 9

[Article: "CPSU Searching Expert on Finland"]

[Text] In the CPSU, important changes in personnel are taking place in the Nordic section responsible for relations with Finland. During the visit of DEVA [Democratic Alternative] it was disclosed that Vladimir Fjodorov, who had worked in the Nordic section of the CPSU for a long time and who was an expert on Finland, has advanced in his party career to the rank of the section's deputy chief. He is also known by the nickname "Roffo" in Finland. I. Rozhdorozhnij, who has been in charge of the section, is retiring. Stefan Smirnov, who was responsible within CPSU for the parties in Finland, retired in the fall and is now writing in SUOMEN SOSIALIDEMOKRAATTI.

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MASS OF POLITICIANS IN FORTIES BLOCKING YOUNGER GENERATION

Helsinki UUSI SUOMI in Finnish 12 Jan 87 p 12

[Article by Olavi Jouslehto: "Political Change of Generations Far Away. Block of Politicians in their Forties Discouraging Younger Ones"]

[Text] The young politicians of the beginning of last decade have occupied the top positions of the political machinery so tightly that there is hardly room for a change of generations in the near future.

This will be obvious in the form of only minor infusions of new blood in the next elections, as well as probably in the elections of the entire 1990's. Hardly any party has the potential to storm into politics and push aside the current politicians, who are in their forties, as was the case in the early 1970's.

In practice, the situation means that only very few new names will manage to get past the front of the middle-aged politicians with about fifteen years of experience.

The lack of challengers results from the fact that the political activity of the 1960's changed into contempt of politics in the 1970's.

This happened in the schools as well: Teiniliitto [Senior High School Students' Union] crumbled and student politics hit an all-time low. That is what led to the drying of the channel which produced or activated the political generation currently in power.

Everything Available

In the two parliamentary elections at the beginning of last decade, dozens of young politicians of the so-called baby-boom emerged, particularly into the parliamentary groups of SDP [Finnish Social-Democratic Party] and the Conservative Party.

Almost all of today's decision-makers within SDP began their highly visible political careers then, including chairman and prime minister Kalevi Sorsa, party secretary Erkki Liikanen, vice-chairman Matti Ahde, first vice-speaker of Parliament Matti Louekoski, as well as those transferred into the reserve: Ulf Sundqvist, director general of STS, Pirkko Tyolajarvi, governor, etc.

At the same time, there emerged Harri Holkeri, the conservatives' presidential candidate and bank manager, Ilkka Suominen, chairman, Pertti Salolainen, member of Parliament, etc. Among those who could not take the hectic speed of the time were Juha Vikatmaa, who was at that time considered the conservatives' radical comet, and Osmo Kaipainen, SDP's young minister of social affairs, who built a retirement bomb in the so-called junior league [sic].

Fewer young people were introduced in the leading positions in the Center Party at the beginning of the decade. The students belonging to the Center Party in those days were either not allowed to get into the fast track or else they were quickly put in the official machinery of the sectors ruled by the party's own ministers.

The only one to succeed among the young Center Party politicians of the early 1970's was Paavo Vayrynen, the party's now current chairman, presidential candidate and foreign minister. As a result of political power structures, he has risen higher than any of his contemporaries.

But also in the Center Party, the positions of power are in the hands of those in their forties. The Center Party politicians in their forties only entered the politics a little later.

There is more room in RKP [Swedish People's Party] and in SMP [Finnish Rural Party] even though also their leading positions are in the hands of the young and probably will remain so for a long time.

Few Challengers

The good thing about the current situation is that there are politically experienced people to fill the position of the head of state as well as the positions below him, all available in so-called powerful parties for the rest of the century.

The bad thing is that the current politicians in their forties have occupied and are occupying the positions so that there are no guarantees about successors.

Unless there is a revival in the natural course of change, the decision-making generation, who will reach retirement age at the beginning of next century, will be replaced at once shot, as was the case in the early 1970's. At that time, however, the young people who were experienced and trained in the student and youth politics and available in excess in the 1960's will be missing.

Room for Economists Now Available

The lack of student and youth politicians would now offer possibilities for entering the fast track of politics for example to people who have won their spurs in economics.

The problem is money. In politics only very few will earn as much as they do in business. It would be to the advantage of politics to remove that handicap.

Photos:

SDP's Pirjo Ala-Kapee suddenly emerged to be minister even though she had only been in the Parliament since 1979. But her rise was largely due to the fact that SDP wanted another woman from the metropolitan area to fill the position vacated by Kaarina Suonio.

The conservatives' Ben Zyskowicz (32) is already chairman of the Constitution Committee of the Parliament. In his age group, he represents the small minority with an important position.

Esko Aho (32) is a new name in the Center Party's parliamentary group. In spite of his past as a youth leader, four years as a member of Parliament have not brought him much publicity.

Paavo Lipponen (45), a new social-democratic member of Parliament, was building his political future in the party's central office in the early 1970's when the young party officials were scaring UKK [Urho Kaleva Kekkonen] with SDP's "new foreign policy."

Ilkka Kanerva (38), from the Conservative Party in opposition, has been in the limelight since his days as a youth politician, but he has not had a chance to rise to any of the top positions in politics, either. It is to his advantage that the younger members of the party cannot particularly breathe down his neck.

One of the likely risers in the elections is the chairman of DEVA [Democratic Alternative], Kristiina Halkola, also a rebel of the early 1970's. At that time she was one of those whose politicizing in the form of art was so loud that it contributed to the political rise of the Christian League, among others.

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JAKOBSON URGES INCLUSION OF CONSERVATIVES IN NEXT COALITION

Helsinki UUSI SUOMI in Finnish 18 Jan 87 p 23-24

[Interview by Jalmari Torikka: " 'That Is the Only Way to Save the Credibility of Democracy.' Max Jakobson Believes that Inclusion of Conservatives in Cabinet Is Now of Crucial Importance"]

[Text] "The inclusion of the Conservative Party in a broad-based cabinet together with the center and SDP [Social-Democratic party] would strengthen the people's belief in the possibility of a social change within old party structures," says Max Jakobson.

Jakobson considers the forthcoming parliamentary elections the most important elections since the war in several respects.

"There have been enormous changes in the political structure of Finland," he says.

And He Explains Them.

With the decades, Max Jakobson, 63, has become the foremost appraiser of the Finnish society. Long assignments abroad in significant positions of the foreign service, earlier work as a journalist and the past ten years as the managing director of EVA lend an exceptional background for the observations of this Doctor of Political Science, h.c.

Now that this politically independent analyst is free from the stamping machines of permanent jobs, the receivers of his messages are dropping the scales from their eyes and the wax from their ears. People can see what he is pointing at and are ready to listen to what he says.

[Question] We are facing the parliamentary elections. To which earlier situation can the current one be compared?

[Answer] It is misleading to compare these elections with anything since the situation is structurally different.

It has bothered me that the current political discussion is dominated by the presidential elections and the issues of personality associated with them.

However, the parliamentary elections precede the presidential elections both in time and importance of the issues.

One more reason why we cannot compare the situation to any earlier pre-election period is that we have been used to the fact that the presidential elections decide the entire direction of politics.

Structural Change Taken Place

Jakobson says that during the Kekkonen era our system was president-dominated.

[Answer] However, Koivisto has, intentionally and according to his own outlook, been developing the system towards a parliamentary direction. From the very beginning.

This a major change.

However, thoughts and routines are still attached to the Kekkonen system. Even the previous parliamentary elections were held in the shadow of the change of presidents from Kekkonen to Koivisto.

Also the cabinet was formed according to old scripts. Another significant structural change is that, for the first time, there is no foreign policy tension involved in the parliamentary elections. Of course, there was none in the last elections, either, but we did not quite realize it at the time.

Now that people have been speaking about the possible inclusion of the Conservative Party in the cabinet, the issue has not been whether the Conservative Party could be included but with whom and with which platform.

And the third structural change is the fall of the communists. They are no longer a significant political power in this country.

These are important changes in Finland's political structure.

Red Soil 50 Years Old

Jakobson reminds us that the Red Soil will be 50 years old this year. Originally the Red Soil was a peasants' and industrial workers' union. There are not very many peasants in today's society and also the proportional share of industrial workers is decreasing. The structure of society has changed and, according to his assessment, the structure of politics is now beginning to follow it.

[Answer] While our political discussions have been revolving around persons, it has not taken these significant structural changes into consideration.

[Question] He admits that this kind of distortion has been enhanced by the early official nominations of Paavo Vayrynen and Harri Holkeri as presidential candidates.

[Answer] Although, I believe that Vayrynen's challenge was not focused on Koivisto but on the social-democrats and their power.

However, after these parliamentary elections we will seriously have to consider whether the cabinet could lean more on its right foot. Until now, it has been the left foot that has been stronger. In our country, changes generally are only issues of the differences in stress.

[Question] When Jakobson is asked whether he believes that the old parties have comprehended the structural changes he has described, he answers that the roulette easily rolls in the accustomed way.

[Answer] Many people are sceptic about whether anything can be changed, now that these cards have been used in the game for 50 years.

And, of course, people will ask how it will really happen in practice.

Conservatives Can Change Everything...
So, if the Conservatives are included in the cabinet, will the people's belief in the possibility of change within the existing party structures be enhanced?

[Answer] Certainly.

The credibility of the entire parliamentary system and the old parties would be enhanced.

We cannot talk abut general reasons any longer.

The fall of the communists will also create a new structure in the party sector.

Since 1945, we have been used to dividing the party sector into four parts: the extreme left, the moderate leftwing, the center groups and the conservatives.

Generally, the cabinets were formed by leaving out both extremes. Although, there have been occasions when there have been deviations in both directions.

In this model the social-democrats play with the cards of the entire leftwing and the center with the cards of the rightwing.

After the last elections it became obvious that a change was unavoidable. The situation was solved with the inclusion of SMP [Finnish Rural Party]. It represented some change, anyway.

However, the citizens' opinions have continued to turn towards the right. The party sector is now divided into three areas.

The time has now come to implement the change in the cabinet coalition and platform as well.

I believe that it can be implemented in a joint cabinet of the three major parties.

For the country it would be the best solution. As I understand it, it also corresponds to the people's will.

People want the parties to cooperate. They do not want tough confrontations in politics.

[Question] However, Jakobson believes that it would be a difficult issue for the social-democrats.

[Answer] I recall what Koivisto said in one of his speeches, in 1966, I believe.

When justifying the need for cooperation between the social-democrats and the communists, he said: In Finland's politics, one-fifth (i.e. Center Party) continues to rule as long as the leftwing is not united.

Now, one-fourth, i.e. the social-democrats, has been predominant in the politics of Finland.

Challenging Alternative to Social-Democrats

In any case, a cabinet consisting of the three major parties would be a challenging alternative to the social-democrats, as well as to the Center Party.

Both of them would have to disregard issues of party politics and put the priorities of the society above everything else.

The situation can be compared to the year 1966; at that time Kekkonen had to force the Center Party into the cabinet.

It was a hell of a difficult and tough problem to the Center Party.

[Question] Is it possible then that Koivisto would now force the social-democrats to make a similar decision?

[Answer] That I cannot say.

In any case, it is essential that Koivisto has not started to run as a presidential candidate of the social-democrats. When forming the cabinet after the elections, he is the president of the republic and not a presidential candidate.

[Question] But wouldn't continuing the Red Soil even after the elections be a more probable solution? It is hardly likely that the citizens' assessment of the four years of work done by the current cabinet would be very negative?

[Answer] Undoubtedly people are rather satisfied with the results of the cabinet. And with the fact that we now have a politically stable situation.

However, we are facing very difficult issues. And to solve them, we would need extensive cooperation in which the conservatives should be included. In Austria, a joint cabinet of the rightwing and the social-democrats has just been made to implement the structural change which is ahead. That is what we are facing.

And, if the change is not obvious, it would be detrimental to the credibility of our political system.

Involving the proportion of the population which is represented by the Conservative Party in making the decisions concerning our country would be a value per se.

Sorsa Really Means It

Jakobson believes that Prime Minister Kalevi Sorsa was really serious when he talked about the conservatives being on the same starting line in the formation of the new cabinet.

[Answer] But all three parties are equally in the role of the decider. Not one of them is without aces.

However, this game should not be played before the results of the parliamentary elections are known.

People usually say that no matter how things go in the elections, everything continues in the same way.

This is not true.

Elections have always had an effect on the matters of the country and the platform of the cabinet, even if the outcome has not always been fully reflected in the cabinet coalition.

The electors have had continuing influence on the content of politics. One example is the changes in the social policy of the social-democrats. They were brought about by the electors.

Now they have the opportunity to influence the cabinet coalition in a concrete manner.

The change thus lies in the hands of the voters. Once again.

But, also the change has to take place in the spirit of consensus.

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PARTIES' ELECTION PLATFORMS SEEN INADEQUATE

Helsinki UUSI SUOMI in Finnish 22 Jan 87 p 2

[Commentary by Jukka Knuuti: "With Hidden Themes into Elections"]

[Text] Even though the elections are only 41 days from today, it is difficult for voters to know with which themes the parties are going into the elections.

The themes should be reflected in the election posters which, in due time, will be put up in the streets and on the squares. But, at least in the election posters of the three largest parties, the SDP [Social-Democratic Party], the Conservative Party and the Center Party, there is very little ideological or political content.

For example, what does the social-democrats' "Friendship as a dream, unity as the world" tell us about the party's objectives. Who wouldn't support friendship.

And, does talking about the world mean the international solidarity associated with the party's ideology? At least it could make a slight difference to the Center Party, with "Finnish direction" as its theme in the posters. In the same way, the conservatives' "Grasp tomorrow's possibilities" could suit any party.

The pictures in the posters do not help much, either. Even though, the rose-red color of the social-democrats is some kind of a hint. On the other hand, a whole lot more people associate the red rose with the song "heijaa ruusut tulipunaiset..." [cheer to the red-red roses..] than with SDP's symbol, which obviously has been borrowed from Sweden.

At first glance, there are no clearer explanations to the flying swan of the Center Party than to the conservatives' little girl picking flowers. Very few people associate the flowers picked by the girl to the party flower, which is the cornflower.

As such, there is nothing new in the posters' lack of ideological message. It was in the previous elections that the Conservative Party and SDP both quoted the same sentence from the second paragraph of the Constitution: "In Finland all power is vested in the people."

If the posters are empty in their ideological message, the parties' addresses concerning their election objectives have not been very clear, either.

All are painfully aware of the fact that the public at large, at this stage, is not particularly interested in the elections, which will be held in nearly a month and a half. Therefore, it is not worthwhile to initiate any detailed campaigns. It may even happen that, in the period of searching just before the elections, the themes published a month ago would only be a handicap. Therefore, the message is saved until the very last minute before the elections.

For the same reason, experts on polls warn people about putting too much faith in the different polls. Particularly, based on the experience four years ago, it is believed that a significant portion of the shifting voters will make their choices after having seen the great election debate on television.

The very same show taught us a lesson four years ago. The big victory promised to the conservatives in the polls was seen to dissolve, partly because of Ilkka Suominen's feeble appearance in the big election discussion. On the other hand, SMP's [Finnish Rural Party] success, which exceeded the expectations, was attributed, to a considerable extent, to Pekka Vennamo's excellent electoral rhetoric in the discussion.

Whatever the case, in March about four out of five people eligible to vote in Finland will express their opinions on the composition of the parliament. The percentage is high compared, for example, with that in the United States where, in the last elections, only 53 percent of those eligible to vote were electing their president.

Also, it is useless to yearn for the record-high voting percentages of the years past. They are nothing but theoretical after the Finns residing in Sweden were granted the right to vote.

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POLL EXAMINES MUTUAL ATTITUDES OF GREEKS, TURKS

Athens PONDIKI in Greek 27 Feb 87 pp 24-25

[Text] Using Greek and Turkish words for the title "Ela Vre Kardasi Mu" [come my friend] the Turkish magazine NOKTA published a poll the Gallup International Institute took in September and October on the attitudes and views of the Greek and Turkish people about issues which concern them. It writes:

--The (polling) firm PIAR assisted in Turkey and the firm ICAP in Greece. Two thousand one hundred fifty one Turks and 1,800 Greeks were polled. We publish the whole article of the Turkish magazine without comments. We also publish the relevant sketches except two for lack of space:

[Question] How many have visited each other's country?
Greeks: Their interest is greater. Nine percent visited Turkey.
Turks: Only 3 percent traveled to Greece.

[Question] Do they know each other?
Greeks: The Turks are better known. Yet the percentage of Greeks who up until now have met a Turk does not exceed 30 percent.
Turks: Until now 93 percent of them have not met a single Greek.

[Question] Degree of animosity:
Greeks: Their animosity toward the Turks is somewhat smaller: 38 percent.
Turks: The Greeks and the Bulgarians are enemies to an equal degree: 45 percent.

[Question] Which neighboring country would they like to visit more?
Greeks: About 7 percent want to visit Turkey, but Italy attracts them more.
Turks: Greece is interesting to only 4 percent. Yugoslavia is the country they want to see more.

[Question] What sentiments of trust?
Greeks: Twenty seven percent find the Turks worthy of trust and their own self-reliance greater.
Turks: Only 5 percent have any trust in Greeks, while 95 percent believe the Greeks and Bulgarians are untrustworthy. The Turks are the most trustworthy persons.

[Question] What are their most important personal problems?
Greeks: Those concerning health and finances are their foremost problems followed by personal deadlocks.
Turks: First among all are problems connected with health and finances; unemployment is third.

[Question] What is the biggest problem their countries face?
Greeks: For 66 percent, inflation, followed by unemployment. For 29 percent the issues of Greek-Turkish relations and of Cyprus are important.
Turks: Inflation takes first place with 61 percent, followed by unemployment. Relations with Greece and the Cyprus issue are important for 27 percent.

[Question] How are they informed about each other?
Greeks: Through TV, radio and the press. But 49 percent have reservations about the news given on Turkey.
Turks: From TV, radio and the press. But 23 percent do not consider trustworthy the news given about Greece.

[Question] What is the role of the Third World countries in bilateral relations?
Greeks: According to 92 percent America has a finger in bilateral relations.
Turks: Seventy two percent believe that America influences these relations.

[Question] How will the Greek-Turkish dispute be solved?
Greeks: The best way, say 58 percent, is through dialogue, while 29 percent would like the intervention of a third party. Of the latter, 59 percent propose the United States.
Turks: Seventy seven percent proposed talks, while 22 percent feel a third country must intervene. Of them, 46 percent say the task must be undertaken by the United States.

[Question] Sentiments about each other:
Greeks: Thirty four percent feel the Turks show a hostile attitude. As many, however, find friendly the approach by the Turks.
Turks: Thirty eight percent are of the opinion that the Greeks harbor hostile sentiments against them.

[Question] Why the [Greek-Turkish] dispute?
Greeks: For Cyprus, the continental shelf, the Aegean Sea.
Turks: For Cyprus, the continental shelf, the Aegean Sea.

[Question] Will there be a war?
Greeks: They say "we exert greater efforts for peace," but 25 percent say there is danger of a clash. However, 49 percent believe that no such danger exists.
Turks: They say "we exert greater efforts for peace." According to 23 percent there is danger of a clash, but 36 percent believe there is no danger.

[Question] Individual traits:
Greeks: They see the Turks as people who love children, like to eat and

drink, are religious and like to acquire wealth.
Turks: They know nothing about the Greeks and cannot express an opinion.

[Question" How are they similar?
Greeks: They say the food of both countries is similar.
Turks: They don't know.

[Question] Social relations:
Greeks: They would not marry a Turkish man or woman, but on the questions of neighborly relations, excursions and business relations, their attitude is positive.
Turks: Their approach to any kind of relations is negative.

[Question] Way of life:
Greeks: They see themselves as European and Mediterranean. They consider the Turks Anatolian-European or nearer to the Arab way of life.

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BRIEFS

KOUTSOGIORGAS' ABSENCE QUESTIONED--Mr Agam. Koutsogiorgas has received permission from his party and from the Executive Bureau to leave for a 3-month stay in France where personal concerns require his presence. Given the fact that the next 3 months will be critical for the PASOK from a political point of view, it is probable that this absence means the retirement of the former parliamentary spokesman of the PASOK from the active political scene. And the only thing left to remember is that combative attitude of the former minister, which he must regret when he sees it on videotape. [Text] [Athens POLITIKA THEMATA in Greek 20-26 Feb 87 p 11] /9274

PAPANDREOU FAMILY INVOLVEMENT--The newspaper ELEVTHEROTYPIA reported yesterday: "It seems that still another of the Papandreou sons has begun to play a role in political developments even if he still has not appeared officially on the political scene. We are talking about Nikos Papandreou, who intervened during the last 20 days in 3 cases of intra-government disagreement and contributed to the solution of an equal number of problems. What does this mean? Has the prime minister and PASOK president decided to "bet" on another one of his sons, or is it simply that still other members of his family will be entering the political game?" And how about Mr Papandreou's grandchildren? Are they also close to "playing a role in political developments"? [Excerpt] [Athens I VRADYNI in Greek 21 Feb 87 p 2] /9274

CSO: 3521/92

PLANS TO PROTEST AGAINST WOENSDRECHT INF BASE, CONTRACTORS

Rotterdam NRC HANDELSBLAD in Dutch 9 Feb 87 p 7

[Report by Folkert Jensma: "Activists against Cruise Missiles Concentrate on Three Large Companies"]

Wageningen, 9 Feb--The campaign "Don't Go Along with Woensdrecht" will concentrate on three large companies this year: Oce van der Grinten, Heidemei and Bruynzeel. On 1 November a peace demonstration will be held in The Hague with the objective of again obtaining the 3.7 million signatures of the national petition against cruise missiles, submitted in October 1985. On 20 June, access to the air bases Woensdrecht, Soest, Havelte and Volkel will be blocked.

These are the main plans presented on Saturday during the regional campaign conference of BIVAK, the Broad Initiative for Stronger Action against Cruise Missiles. BIVAK is an umbrella organization of trade unions, small leftist parties and action groups which did not want to abandon resistance to the cruise missiles after the deployment decision had been made. According to the organizers, the meeting in Wageningen was attended by about 200 people.

Lists

With some regularity, BIVAK publishes lists of companies which, according to peace activists, are working on the construction of the new American cruise missile base in Woensdrecht. Therefore it pickets at the entrance gates of the air base with binoculars and pencil and paper at the ready. The most recent list contains 185 names and addresses of companies and institutions, sometimes accompanied by names, addresses and telephone numbers of board members. The nature of the company is noted, as well as the frequency with which and the dates on which the base in Woensdrecht was visited. The large number of companies that has been spotted is seen by the activists as proof that there is a "consortium" which distributes the activities as much as possible.

The Woensdrecht Monitoring group which gathers the information also tries to find out whether the companies spotted have links with South Africa or are involved with the "nuclear energy lobby." In the list intended for the peace groups in the eastern Netherlands, for example, the company "Turco Netherlands

BV" in Ede is listed. This company is involved in "cleaning and surface treatment" and was seen at the air base on 18 June and 2 July. After the entry: "spheres of activity," the list notes: "At one time cleaned a Belgian nuclear energy plant." In the East Brabant list, Grasso's Royal Machinery Works NV in Den Bosch appear with: "Air pressure apparatus. Industrial cooling technology. Supplies under the name Grenco. Worked a number of times for defense and also for the South African government." There are other particularities which receive the attention of the activists. At Fokker, which has a company installation at the air base, "Iranian military were spotted" in July of last year, "in connection with maintenance of F27 airplanes."

According to spokesman Bart Bom of BIVAK, the plan calls for local peace groups to approach the personnel of the companies spotted. "That is only possible by contacting the Works Council or the union, or through blockades and picket lines." By convincing the personnel of the undesirability of carrying out work for the Woensdrecht base, BIVAK hopes to exert pressure on the boards of directors of the companies. Direct contacts with members of the boards are also encouraged. According to the monitoring list, the names "can be found at the Chambers of Commerce." If it is a BV [private corporation], "then find out if the requirement has been met of publicizing the annual account or at least a balance sheet. If that can't be found 13 months after the end of the financial year, report it to the Economic Control Service." The personnel of Heidemij indeed spoke out last year on the work carried out in Woensdrecht by the company.

Further, two company sit-ins were carried out last year, one by an office of the Heymans construction company in Alkmaar and one in Bergen op Zoom by the concrete plant of De Schelde BV. Moreover, a bomb attack, which was never cleared up, was made on an office of the Hollandse Beton Groep [Dutch Concrete Group] in Gouda. A "working visit," which members of the The Hague monitoring group wanted to make to the engineering firm of Witteveen and Bosch in Deventer, failed. The group returned without having accomplished anything because, according to Hans Robbesom, "the place was crawling with police. Obviously it had leaked out." In the offices of the concrete plant in Bergen op Zoom, which was consulted during the sit-in, the Monitoring Group at the time found names of still unknown suppliers of concrete to Woensdrecht.

According to the monitoring group, the Deventer engineering firm is responsible for the technical blueprints of the installations for the missiles. The group says it has copies of the drawings. Monitoring group member Thijs van der List: "Those were sent to us anonymously."

All companies which appear on the list have been approached by the group with the request to confirm their activities. In general, according to Van der List, the group was subsequently referred to the department of defense. In some cases they admitted working there, sometimes with the remark: "only for the Dutch share" or "only for the civilian part of the base." The monitoring group is not interested in that distinction, however. The group hopes to reach municipal officials and local action groups with the list. Occasionally a construction company requests the list, "probably to see whether the competition is on it," according to Van der List, "or to see whether they

themselves are on it already." He emphasizes that "anyone interested" can get the list.

BIVAK also tries to exert influence via the municipal councils. For example, the monitoring group keeps track of whether there are also "bunker constructors" who simultaneously participate in civilian home construction projects. The municipal councils of Arnhem, Deventer, Zaandam, The Hague, Finsterwolde, Wageningen and Nijmegen adopted motions in which a link was made between the contracting out of municipal jobs and participation in the construction of cruise missile base. The decision of the Arnhem municipal council to effectively pass over, for municipal commissions, firms which had been spotted was, however, annulled by the Council of State at the recommendation of the minister of home affairs. The VNO, the Federation of Netherlands Enterprises, objected to the actions last year. It didn't object to municipalities having their own opinion and expressing it as well, but "municipalities should respect decisions made by the state government."

The idea to concentrate the campaigns on three larger companies was inspired by the desire for more unity in the actions of local groups. Hans Boot, coordinator of the action conference, finds that the "Don't Go Along" campaign so far has not brought "great successes." By directing attention to a few "spearhead companies" the activists hope to be able to concentrate the resistance. Oce van der Grinten supplies office equipment to the base, according to BIVAK. Bruynzeel was to supply wood partitions, and Heidemij is active in in-ground activities.

BIVAK is also planning to develop specific action plans for the moment when the cruise missiles will arrive at Woensdrecht. Four FNV [Netherlands Trade Union Federation] unions have joined BIVAK: the Food Union, the Women's Union, ABOP [General Association of Teaching Personnel] and the Arts Union. Further, BIVAK is uniting the action groups Nuclear Free State and BONK.

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NATIONAL APATHY, RECOURSE TO EXPEDIENTS SCORED

Athens TO VIMA in Greek 22 Feb 87 p 11

[Article by Nikos Dikou: "Trojans?"]

[Excerpts] We are the last in productivity. But there are still worse things! Once upon a time, we got along without working too much. Helped along by our "intellectual brilliance," by our "clever" mind and by the "God of the Greeks," we always saw results in the end.

Now, the result is ZERO. Sure--we are working even less. But it seems that "intellectual brilliance, cleverness and God" have abandoned us.

If I had to characterize the present Greek situation with one word, I would choose the mile-long (but very clear) term "ineffectiveness" ["anapotelesmatikotita"]. Nothing is working effectively. Not our economy, not our society, not even our culture. We are not only lacking electric power, lignite, gasoline, but also education, industry and technology.

How do we achieve all that? As in silent comedies, we fall one on top of the other, we get up, we hit each other again, we fall a second time. We trip each other, we step on soap, we run up the down escalator...and in every case, WE DO NOT GO FORWARD! One organization is competing with another, one institution is undermining another and in the end, the only work accomplished (minimal, too) has been the obstruction of all tasks.

And when we reach the end of our rope, we go on strike! At a time when we should all work twice as much, we go on strike. And we achieve the opposite of what we are seeking. The great loss of man-hours reduces even further our [minimal] national wealth--that is, the pie we want to divide.

Claims? Of course! But one cannot receive from where there is nothing. The only thing that can be claimed in present-day Greece is a larger share of the debt, because this is the only thing we are accumulating!

We have lost touch with reality. We are living in another world. We not only have lost the train, we have also destroyed the tracks. We worry about non-existing problems. We drown in a glass of water. We are lacking gasoline in a world flood of oil. We are buying power from technologically under-developed countries like Albania.

But...we are proudly forging ahead, never working, never anticipating, but making self-generated plans and with deep faith in the principle: "See first and do afterwards." (This is a profoundly wise methodological axiom of Greek management. The "see" applies to us and the "do" always to someone else.)

What is progressing today in Greece? Our old glories--merchant shipping, tourism--are vegetating. Our industrial installations will soon be ready for the garbage heap. Our farmers are known for the grants they receive. Our environment is being destroyed, just as our culture is, which is fact going toward the stone age. Shall I speak about the ESY [National Health System] that is multiplying the portable beds? About our bureaucracy, our banks, our fiscal system?

As for our society, it is regressing to feudalism. Princes, dukes and counts, tiny states and feudal holdings, cliques and interest groups. (One is lost if the does not belong!) All of them are busy undermining each other, and they are undermining all of us.

Something has been going wrong in recent years. Plans, words, intentions--the result is zero. Never were Greeks so ineffective, so unsuccessful, so devoid of goals, so unlucky as now!

Unlucky? I doubt it. Perhaps it is convenient to label "unlucky" everything that reveals our powerlessness? Perhaps the new international realities are leaving us behind? Our age-old laughable weapons are not enough--we need thoughtfulness, study, organization and work!

We are "Trojans?" is "our fall certain?" I hope not. But nowhere do I see a miracle. And I must admit that I have begun to worry in recent months....

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EARLY RETIREMENT OF RELIGIOUS AFFAIRS HEAD

Istanbul TERCUMAN in Turkish 4 Nov 86 p 9

[Text] Ankara -- The retiring head of the Office Religious Affairs (ORA) Tayyar Altikulac bid farewell to his colleagues yesterday. Said Altikulac, "I never conceded from my principles throughout my tenure, and avoided mixing duty with politics."

After 15 years of service at ORA, 8 of it as head, Altikulac asked for early retirement. In a farewell ceremony yesterday, the acting head of ORA Hamdi Mert recounted the services rendered during the Altikulac era, the foremost being keeping ORA out of politics. Mert expressed regrets that Altikulac is leaving the job at such a young age and in his prime.

Minister of State Kazim Oksay pointed out that despite constant changes of government and people moving in and out of office, ORA has stayed remarkably unaffected by ups and downs. And there were significant accomplishments as well. Oksay then went on to say:

As an institution premised upon prestige ORA has managed to stay clear of politics. And as we know, involvement by religious officials in politics has caused nothing but harm in the past. I expect that abiding concern over these matters will be maintained in the future.

Spiritually Gratified

Speaking at the ceremony, Altikulac said his early departure had no political connotation whatsoever. Having held important positions throughout his career he had already attained 'spiritual gratification', and also felt somewhat tired. Said Altikulac:

In the last 15 years I have continually been in leading positions. I expressed my wish to retire to the prime minister and my own minister. My request has been graciously accepted. I will continue to be in the service of the nation, this time in research activity.

During the ceremony Altikulac was given a shield by Minister Oksay commemorating his services. The ceremony was attended by Minister of Justice Oltan Sungurlu, Minister of Health and Social Services Mustafa Kalemli, Chief Justice of the Constitutional Court Orhan Onar.

Farewell Visit to Evren

President Kenan Evren received Altikulac at Cankaya Residence at 3:30 pm today. The president thanked Altikulac for his services during his tenure as head of ORA.

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JOURNALISTS ASSOCIATION DEPLORES RELIGIOUS INFLUENCE ON PRESS

Istanbul CUMHURIYET in Turkish 5 Nov 86 p 10

[Text] The winners of the Burhan Felek Press Service Awards, an annual event organised by the Journalists Association, received their prizes yesterday. Our colleagues Agop Arad, Hasan Semih Tiryakioglu and Murat Sertoglu were handed their awards by the Istanbul Governor Nevzat Ayaz. Nezih Demirkent, president of the Journalists Association characterized the condition of the press as worrisome, as of late 86. "The press has come under outside influences lately," said Demirkent. He went on to say:

The influence of religious groups within the press has been on the increase almost daily. Given the issues we face -- press council, journalistic ethics, problems of the Anatolian press -- we have been running in circles instead of increasing our awareness of issues. We are saddled with a government, which is pleased to see us in a sorry state, and an indifferent TRT. Using the occasion of this ceremony we want to draw attention to these problems. None the less, we will overcome this crisis following in the footsteps of our distinguished colleagues of the past.

Congratulatory telegrams sent by President Kenan Evren, Speaker of the Assembly Necmettin Karaduman, Prime Minister Turgut Ozal and ministers were read aloud during the ceremony. Meanwhile, Burhan Felek, a former president of the Association, was remembered on the 4th anniversary of his demise. The ceremony at his grave, at the Cicekci section of the Karacaahmet cemetery, was attended by his relatives, friends, and a group of students from the Burhan Felek Lycee.

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RELIGIOUS LEADER APPOINTED TO BONN DUTY

Istanbul MILLI GAZETE in Turkish 5 Nov 86 p 10

[Text] Mehmet Kuzu, the mufti of Kocaeli, said his farewells to his colleagues and friends in Kocaeli. He is due to start his new job in Bonn next week.

Appointed as mufti of Kocaeli back in 76, Kuzu attended the farewell meeting held in his honor at the Association of Religious Officials clubhouse where 300 of his friends and preachers were present. Said Kuzu, "I wish all the best to my Muslim brothers in Kocaeli. I loved the people of this town very much. Even if I go to the other side of the globe I will still be with you in heart and soul."

Kuzu will remain in Germany between 1-4 years. Serving as acting mufti is Murakkip Han.

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PERSONAL RESPONSIBILITY, STATE - RELIGION RELATIONSHIP EXAMINED

Istanbul TERCUMAN in Turkish 31 Oct 86 p2

[Commentary by Hamdi Mert, acting head of Office of Religious Affairs]

[Text] For a perceptive eye life is full of so many object lessons! I was reminded of this yet again during a brief journey across Burdur, Antalya and Icel.

What a Mess!

We were going from Antalya to Anamur. Our bus stopped in Alanya. I wanted to buy some refreshments. A customer, standing in front of me in the line, asked for a small piece of chocolate (which I later found out to be TL 45) and a bottle of mineral water which we know to be TL 60 everywhere. The tab turned out to be TL 190. The customer wanted to protest but to no avail. The man at the counter was uncompromising. We all fell silent and walked away without purchasing anything.

An hour later there was another stop, this time at Gazipasa. I tried to purchase the mineral soda I couldn't get in Alanya. I couldn't bring myself to ask the price beforehand. It turned out to be TL 100. Just to satisfy my curiosity I wanted to know the real price of mineral soda. I was told, "It's gone up to TL 100, brother!" I ventured to say, "Mineral soda is TL 60 everywhere, how come it's TL 100 here? Who is responsible for this son?" "The boss, brother, the boss!" was the answer. He said it in such a way that had I asked, "Which boss?" he might well have pointed in the direction of Ankara.

I was walking up and down the bus station thinking, "This is why we'll never be able to make it!" when I saw a car with an official plate. It was 11 pm. Soon there were drunken noises coming from inside the car which was starting, stopping, stalling, braking, doors slamming; it was quite a sight. What is

going on?" I ventured. Someone, even more dejected than I was, tried to respond: "Well, what can I say!" He then turned and left the scene, clearly embarassed.

I took the night bus from Mersin to Ankara to gain a working day. The bus was so filled with cigarette smoke that being able to breathe was a feat. There was a family with a child near where I was sitting. The child was complaining of upset stomach, saying, "Tell the uncles not to smoke, mother!" A young woman around 20 was sitting in the row in front, belching smoke all over. She turned back with a manner totalling incompatible with womanly grace, and said to the child: "If you are inconvenienced, tell your parents to travel in a private car!" Yes, that is what she said. And none of us could say, "If you want to smoke like that why don't you travel in a private car!"

Lack of Public Morality

With us, everything is expected from the 'state' or the government. There is no 'public opinion' to act as a supportive mechanism. These events are simple enough to be resolved just by intervening in the right place, or by letting the authorities know -- as in the case of the official car. But we can't. We can't break the circle.

Another example: Our bus arrived in Anamur at 1:30 am, in the middle of the night. There was a mosque right next to the bus terminal -- Cyprus mosque. I know it because I know its industrious preacher who had come all the way to Ankara to establish a library in the mosque compound. Right next to it,perhaps 20-25 m, a coffeehouse was in full swing. There was such a crowd, with cassettes playing and people dancing, that I wondered how it was possible to worship in the midst of such din. Wasn't there a rule barring establishment of such places in the vicinity of religious temples? Where is public opinion, where are the officials?

Have you ever seen a Jew commissioning a mosque? If there is it's called 'Masjid-i Dirar'. It may fool the naive folk but when it fools the veteran 'hodja' we might call it 'sign of doomsday'.

What Depth, What Erudition!

We often receive calls from the press and news agencies. They want to receive 'information' concerning delicate subjects like 'reaction', 'religion-state-secularism'. These subjects are matters of curiosity for the press, and good for circulation. They go on fishing expeditions sometimes, in search of

something to report. One day I heard an excited young voice on the line, "I found it! Eureka!" It turns out that in the historic town of Iskilip the district governor and the mufti got together and decided to start the 'Friday prayers' 15 minutes late so that those working at government offices and other places can make it on time. "How can they do it in a secular country?" "What do you think on this issue?" were the questions. I started laughing. "Young man!" I said. "It isn't as if civil administration adjusted itself to the prayers. Prayers were adjusted to the administration." The questioner on the line was not pleased with the answer as he realized there was no story in it. "I had thought otherwise," he was able to say.

Well, so this is the level of erudition in our media responsible for creating the public opinion! Isn't this the mentality which accounts for the bull-in-a-china-shop behaviour that has characterized our 'religion-state' relations -- delicate issues requiring unusual maturity, cool and expert handling?

That is why we won't be able to make it!

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HEADCOVER DISPUTE AT REPUBLIC DAY CEREMONY

Istanbul TERCUMAN in Turkish 30 OCT 86 p 8

[Text] Erdemli -- During the 63rd anniversary celebrations of Republic Day, female students at the Erdemli Preacher Lycee were barred from participating in the ceremony wearing headscarves. Being asked to remove the headscarves, the students left the site of the ceremony.

Taking part in the Republic Day celebrations, Erdemli Preacher Lycee students arrived at their designated places at the ceremonial site at 9:30 am. School director Abdulkadir Ozcan asked the students wearing headscarves to remove them. But the students refused to comply on the grounds that it was against their faith. Ozcan persisted in his demands informing the students that unless they removed the headscarves they would not be allowed to participate in the ceremony. Upon which students wearing headscarves left the ceremonial site.

Meanwhile, Sub-governor of Erdemli Osman Aydin announced that an investigation is under way concerning the school administration in relation with the incident.

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CSO: 3554/82

CHANGES IN SECURITY INVESTIGATION CRITERIA

Istanbul MILLIYET in Turkish 31 Oct 86, p 7

[Text] Security Investigation Code, which was said to produce big delays in getting into jobs, and unfair evaluations leading to dimissal, is undergoing change. According to officials, changes in security investigation procedures will take effect next week in finalized form.

The biggest change concerns the clause relating to responsibility for the actions of family members. From now on, a person will be held responsible for only his/her own actions so far as the security investigation is concerned. If a person had not taken part in any illegal activity and has a clear record, he will be cleared by the investigators. If a family member, brothers included, is sought for a crime or has a criminal involvement, that in itself will not be binding for the person in any way. Under the new code, the statute of limitations will expire after 10 years. As subjective criteria in the old code are weeded out certain operational procedures are being 'softened' as well.

With the coming changes, personal qualities like morality, maturity, forgetfulness or being talkative are brought under more objective standards. The changes are likely to benefit lower-ranking public employees in particular. Certain criteria will not be taken into consideration for lower-level appointments.

Investigation of persons married to non-citizens will be conducted in a regular manner. Under the old code, being married to foreigners merited negative assessment whereas now it will not make a difference.

A high-ranking security official said these changes will do away with some past shortcomings, and processing will be speeded up preventing unfair treatment of citizens. "The new code has been prepared with a view to forestalling the rise in the numbers of those who are turned down by employers because of the security

investigation, and speeding up the process whereby the citizen is notified of the result without much delay." The official further elaborated:

The main reason behind the delays was the inability of our investigators to absorb all the rules and regulations. There were complaints and delays as a result. There were certain improprieties, too. We expect to prevent any misuse by getting rid of the subjective criteria. For instance, there were the criteria concerning morality. This was very much open to misuse. Because interpretation of the criteria varied from one individual to another a situation was created whereby referees consulted during an investigation might be tempted to misinform. These were causing some investigators to produce, however unintentionally, with misconstrued evaluations.

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CSO: 3554/82

BALLADUR ON PRIVATIZATION, CURRENCY, COHABITATION

Paris LE MONDE in French 11 Feb 87 pp 1, 7

[Interview with Edouard Balladur, minister of state for economic affairs, by Jean-Marie Colombani and Bruno Dethomas: "Societe Generale To Be Privatized this Year; Clarification Needed in the Majority"; date and place not given]

[Text] The Societe Generale will be privatized before the end of the year. It is the first of the enterprises nationalized by de Gaulle at the time of Liberation to be returned to the private sector. In the interview that he granted us, Mr Balladur claimed that he sees this as "the government's desire to change the rules of the game of our economy."

The minister of state also outlined the French positions on currency, which will be the object of a memorandum to be filed on Wednesday, 11 February, and called the majority to order: "You cannot at the same time be in the majority and not in it." He feels that a clarification is in order.

[Question] Have the recent crises caused you to regret that the government did not concentrate on economic reforms?

[Answer] There was never any question of limiting ourselves to economic reforms. Our society is experiencing other problems; they also have to be solved. I will mention only two or three: security, which must be better ensured, with all the consequences this entails for example for the penal system. The cultural identity of France, which implies the whole question of nationality and of its means of acquisition. The university problem: our system has demonstrated how hard it is for our society to adapt itself to the modern world, while it is so very important for young people to be able to find a place in it.

Several kinds of attitudes are possible: to change things and say that you are changing them; not to change things and say that you are changing them; to change them and not to say so. Who would assert that our society must remain immobile? In the long term, only honesty pays.

But, given that you have mentioned economic reforms to me, let me add a word. The policy I have been conducting for the last 6 months is a policy of financial recovery, of economic freedom and democracy. And when I take a look at what has been done and at the manner in which this policy was conducted, then three thoughts come to my mind.

First of all, the action which I had an opportunity to explain recently in a small blue book, which as a matter of fact I entitled "The Economic Reform," corresponds to a profound need for our country. France had an urgent need to modernize its whole economic life by getting rid of a jumble of hindrances and regulations which contributed to taking away its dynamism.

Next, this policy has been recognized abroad as being new, wise and sensible in all its aspects. I have the opportunity to note this every time I go abroad or participate in meetings with my colleagues from the other industrialized countries.

[Question] And what about the strikes? Was it necessary to wait for the strike of the railroad workers to talk about a social dialogue?

[Answer] A recovery and modernization policy is often accompanied by tensions; these tensions were revealed symbolically at the end of the year. If we had given in on the question of wages, then the whole government policy would have been challenged. Hence, there was no question of compromising, and I believe that public opinion understood that.

As far as working conditions are concerned, on the other hand, progress definitely needs to be made, specifically to improve the social dialogue in our major public enterprises. But the very important return of participation, the request I made for personnel representatives to be on the board of directors in privatized enterprises, the development of quality circles in public and private enterprises and in the administration: you will agree that all of that is a resolute policy of social dialogue. We did not wait for the strikes to get it in motion.

[Question] And what about the wind that fills Mr Barre's sails?

[Answer] A characteristic of wind is that it is subject to sudden changes. Let us wait for the end of the journey.

[Question] If prices were to slip, would you permit freedom then?

[Answer] First of all, the prices will not slip in 1987. But remember, the idea of re-establishing control over currency exchanges did not even cross my mind when speculation affected the dollar and the German mark. Similarly, the idea of re-implementing price controls is totally foreign to me. On the other hand, I will use all the means the government may have in order to assure complete competition and always defend consumer interests.

We are going to have a month of January which will not be good in terms of prices. I have been reproached for saying so. It is my principle to tell the truth. January will experience the cumulative effects of the cold, the strikes, the gas price hikes, the rate changes which are customary at the beginning of the year, and also, it is true, of the freeing of prices in the last controlled professions. From February onwards we will have returned to a more normal rhythm. I am convinced that things will gradually be settled, and that, thanks to competition, the freedom will generate price reductions. And I would remind you that price results are judged over the year as a whole.

[Question] And what about unemployment?

[Answer] Everywhere the western economies have unemployment rates ranging between approximately 8 to 13 percent of the active population. The main problem for the future is to find adequate expansion to ensure a reduction in unemployment in spite of technological progress. That will take time, and that is why it is legitimate to have recourse to a social approach to unemployment during this period of structural adaptation.

The whole question lies in knowing -- it is a social but also a political question -- how long our societies will stand for such high unemployment rates.

[Question] The 1986 balance sheet is not excellent however.

[Answer] I am sometimes -- why hide it -- very surprised by the pessimism of certain commentaries and certain commentators with regard to the economic situation. Allow me to recall a few figures:

In 1985 economic growth amounted to only 1.1 percent; investments by enterprises grew only by 1.9 percent; salaried manpower in the marketing sector declined by about 100,000 persons; the sliding of consumer prices between the beginning and the end of the year reached 4.7 percent.

In 1986, on the other hand, growth was close to 2 percent. The growth in the volume of investments by enterprises was apparently on the order of 3 to 4 percent, whereas it had dropped every year between 1981 and 1984. Salaried employment in non-agricultural marketing sectors rose slightly over the first three quarters of 1986, whereas it had declined by 600,000 persons between the end of 1980 and the end of 1985, or an average of more than 100,000 persons per year.

Finally, the rise in consumer prices between December 1985 and December 1986 was only 2.1 percent. That result was unprecedented for 22 years. Thus our difference of inflation with the average of the industrialized countries disappeared.

You will admit that it was not useless to recall those 1986 results. They are encouraging and invite us to continue our recovery effort in 1987.

[Question] Isn't it dangerous to have deprived yourself of the exchange controls?

[Answer] What monetary accident have the exchange controls spared France in the last half century?

[Question] Another possible difficulty in 1987: the evolution of currencies. Are the ministers of finance going to meet?

[Answer] France's position has been known for a long time. The relationship between European currencies on the one hand, and the American and Japanese currencies on the other, must be regulated and evolve between thresholds in such a way as to avoid uncoordinated movements. That is not the case yet.

This has resulted in speculation primarily on one of the European currencies, the German mark. As for the franc, I must repeat that since September its value has gone up with regard to all the other currencies in the world, except for the German mark alone.

At the time of the last meeting in Brussels, there was complete agreement between France and Germany. The current parity between the franc and the German mark is excellent, realistic. It corresponds to the development of the economies; hence it is firm. As a matter of fact, all the governments represented in Brussels have praised the reduction in deficits and taxes and the freeing of the economy conducted by France.

How could international monetary uncertainties be reduced in the future? If a meeting of ministers of finance could be useful, then I am willing to contribute to it. But for that meeting to be constructive it is necessary for everyone to make an effort.

Over the last several weeks we have been actively busy bringing the positions among our partners closer together. I still have great hopes.

Accelerate Privitization

[Question] What happened Monday in Brussels, from where you have just returned?

[Answer] Recent events on the exchange market illustrate the need for progress in the European monetary structure.

What should be done? I would suggest, first of all, that the European countries define a common way of thinking about the dollar and the yen with regard to the other European currencies. We, Europeans, are not alone in the world.

Next, the central European banks should be given broader means of intervention to face the new situations.

Next, an effective procedure to check the accounting of the economic policies of the various European countries should be put into place: one could imagine the development of a battery of indicators related to the principal elements of economic life.

Finally, it would be useful to promote the diversification of the exchange assets of the central banks by increasing the place of the public ECU [European Monetary Unit] which must strengthen its role as European reserve asset and especially by organizing the mutual holding of the various European currencies by the central banks. It is in this spirit that we are going to submit a memorandum to the European Monetary Committee which will meet on Thursday. We must draw lessons from past experiences and from the difficulties we have gone through.

[Question] For 1988, don't you regret the fiscal promises which have been made?

[Answer] Absolutely not. I am firmly determined to reduce expenditures by about 40 billion francs compared to their spontaneous evolution, which in 1988, as in 1987, will make possible a reduction of the deficit by about 15 to 20 billion francs and a reduction in taxes, given that tax rates are abnormally high in our country.

[Question] Will you achieve an additional 5 percent reduction in the tax rate on income?

[Answer] That is an objective, but I have made no commitment on this point for 1988. The decision will depend on the one hand on the possibility to reduce expenditures, and on the other hand on the arbitration to be carried out between household taxes and corporate taxes.

[Question] As for the priority given to research in the 1988 budget, do you regret having reduced it in the 1987 budget?

[Answer] Not at all. First of all, because the overall budget for public research grew by 3.7 percent in 1987. Next, because the characteristic of research financing in France is that it is more public than in the other countries. In Japan, 64 percent of the research is financed by industry, as against 43 percent in France. Hence, enterprises must be encouraged to develop their own research effort. That will be one of the objectives both of the 1988 budget and the patronage act, that is to say on the development of initiative and solidarity, which I am preparing. That law will strengthen all forms of patronage, whether they be social, cultural, artistic, humanitarian or university related.

[Question] Privatization, on the other hand, is doing well. It is alleged that you intend to accelerate the movement.

[Answer] The Saint-Gobain operation, and even more so the Paribas operation are there to prove it. They were major popular successes and we must draw the lessons from it.

I have requested an analysis of the financial market prospects for 1987 and of its possibilities, to the extent that such things can be precisely predicted. I expect the results from it to decide on the next steps. If it is possible for us to go faster without carelessness, then we shall do so.

I would not want the movement of privatization to take on the appearance of challenging what was done in 1981-1982. What I am interested in is to ensure that our society and our economy take on a new image, that of responsibility and freedom.

Let us not distinguish what was done at the time of the Liberation under certain circumstances from what was done in 1982 under different circumstances. It is the economic functioning of our country as a whole which must be freed and modernized, aside from any partisan considerations.

In order to clearly show that our approach is neither political nor controversial, I think that it would be desirable to proceed rapidly with the privatization of those companies, more specifically a bank, which were naturalized in 1945. That would express the government's desire to change the rules of the game of our economy, specifically in matters of credit, where the French situation of quasi public monopoly is an aberration in the developed world.

That is why it is my intention to proceed before the end of the year with the privatization of the Societe Generale, which is one of the three major commercial French banks.

[Question] Isn't it true that privatization has succeeded because the prices were too low? Aren't you afraid that it might backfire?

[Answer] As far as the TFI is concerned, it seems to me that they are rather saying the opposite these days.

The price of a share varies over time. The privatization committee has suggested, both for Saint Gobain and Paribas, average prices among the various methods of evaluation, and each time I have chosen a higher price than the one proposed to me.

This being the case, those who purchase the shares must know that they are not purchasing a government bond, but that they are taking a risk and that thus they are associating themselves with the fate of the enterprise. It is up to them to organize themselves in such a way as to better control it. It is thus that privatization and shareholding by the people will modify our economic system and make the management of large enterprises more transparent -- more democratic actually. There is no question of reviving a closed world, where the air circulation is carefully controled.

Call to Majority Order

[Question] Is a strengthening of Europe possible now that the Franco-German axis seems to have become weaker?

[Answer] On the contrary, I believe that it will be improved and strengthened. Both the Germans and the French are aware of the role which their good relations play in the development of Europe. It is obvious that there have been momentary difficulties. I am confident, because on both sides of the Rhine people now are very convinced of the necessity to make our cooperation even closer.

[Question] What do you think of cohabitation now that Mr Barre is going back up in the polls?

[Answer] The parliamentary majority and the government made the unavoidable choice nearly a year ago: shoulder their responsibility, respond to the country's expectations by avoiding a serious political crisis, and implement the profound changes the French were waiting for.

A large number of those reforms have now been completed. The institutions of the Fifth Republic have been preserved; the government has governed effectively and our political life did not experience the indecisions and confrontations that some people had predicted. At the appropriate time, the French will have to judge the results of this policy of recovery and modernization which Jaques Chirac and his government are conducting with courage and will.

[Question] Do you have confidence in the firmness of the majority?

[Answer] The government has gone through a difficult period; it overcame it; now it is pursuing its action. Things must be perfectly clear; you cannot at the same time be in the majority and not be in it, pretend to support it and criticize it at the first opportunity. Everyone must harmonize his words, his thoughts, his background thoughts, his attitude and his action.

An exercise in clarification is necessary; the prime minister will proceed with it at the opening session of parliament in April by asking the National Assembly to once again grant the government its confidence.

Then everyone will shoulder his responsibilities, knowing that it is not possible to support the government's action with one's vote and criticize it in words either, without harming oneself.

The country expects clarity and coherence from those who govern it, but also from those who represent it.

As for me, I have confidence in the solidarity of the majority.

8463
CSO: 3519/77

COMPLEXITY OF PRIVATIZATION OF 'SMALL' BANKS

Paris LES ECHOS in French 19 Feb 87 p 14

[Article by Patrick de Jacquelot: "Privatization: the 'Small' Banks' Headache"]

[Text] After the "heavyweights," Saint-Gabain (total worth, 14 billion) and Paribas (23 billion), a new kind of privatization operation is starting: putting on the market small or medium-size concerns, worth some hundreds of millions or a handful of billions. This is going to raise new technical problems: in proportion to their "modest" size, the passion of subscribers is in danger of being even more immoderate than for Paribas. Hence the necessity for a different approach to privatizirg them.

A fat billion francs for the SOGENAL (General Alsatian Bank Company), 300 million francs for the BTP (Bank of Building and Public Works), 200 million for the BIMP (Private Industrial and Real Estate Bank), 3 or 4 billion for the CCF (Commercial Credit of France); very roughly in order of their size, these are the next banks to be privatized.

These more or less modest dimensions, compared to the two earlier operations, are causing real headaches for Rue de Rivoli privatization. The basic problem: what will happen if the incredible craziness of Paribas, which succeeded in obstructing an OPV (Public Sales Office) where the trifling sum of 15 million in stock was offered, is even very partially reproduced with respect to operations putting into play some hundreds of thousands or 1 or 2 million shares?

No International Issue

The first display planned by the minister of economy: to "recover" a maximum amount of stock for the OPV. To do so, it has already been established that there will be no international issue when the SOGENAL, the BTP and the BIMP are privatized. All of the stock will thus stay on the French market.

On the other hand, since it is impossible legally to formally forbid access by foreigners to such a public offer, foreigners will probably be able to place orders in category "D" at the OPV (after the "A" orders of individuals up to 10 shares, the "B" orders of individuals of more than 10 shares and the "C" orders of legal entities). But in the hypothetical case of a Paribas-type success, in which individual subscriptions would run away with all the paper, foreigners clearly would have nothing.

The second spectacle: to raise the number of shares offered. To do that, stock division will be systematically carried out. "In the beginning, we had set unitary values of 300 francs or 400 francs (310 francs for Saint-Gobain, 405 france for Paribas)," said a Rue de Rivoli person, "but now we have to lower that amount." In this way, the stocks of the future privatized banks should be divided in such a way as to be worth perhaps 200 francs.

Less Than one Share per Subscriber?

There is a limit to this: the registered value of the shares (that is, their original value, generally very much below their present value) may not go below 10 francs. In other words, shares with a registered value of 100 francs like those of the BTP and the BIMP may be divided by 10, but no more than that.

These operations could be revealed as inadequate in spite of everything, and the authorities are led to imagine the worst: the case where there would not even be one share per subscriber. This hypothesis is still very theoretical, but cannot be rejected totally. For the smallest banks, the number of stocks put into the OPV should not exceed 1 million. It is certain that the BTP or the BIMP do not have wide public notoriety, but behavior of this kind cannot be ruled out: "With privatizations, you win on every try. So let's subscribe systematically, even for unknown businesses!" In which case, we can imagine more than a million subscribers for such institutions!

However unlikely it is that such a thing could happen, the authorities are certainly obliged to provide for such an eventuality. "A problem that would have seemed preposterous 3 months ago, but today--", said a Rue de Rivoli person.

In practice, there is no "right solution." Thoughts center on ideas for drawing lots or having the OPV defer the deadline so the shares could be divided one more time.

All formulas that are not very satisfactory and do not cure the total economic absurdity that would occur as the result of a total division of a shareholding operation!

Outside of the banking sector, finally, problems of a similar nature may come up in the case of Havas, which, when put on the market, will involve only a fraction of the capital (since half of it is already private and it will be necessary to provide for shares of personnel, etc.). The remaining two operations scheduled for this spring will be of a different kind, for their part: the CGE because it will be very large (about 15 billion) and TF1 because it is not like anything else.

Box, p 14: "Four Banks in the Spring"; author not identified]

Four small or medium-size banks should be put on the market in the next 3 months. Very different in nature, each poses specific problems.

Commercial Credit of France

With this institution, a formula should be found for privatization that would be closer to the Paribas formula: international issue, a stable nucleus of 20 percent or slightly more.

The capital is currently made up of 10.33 million shares with a nominal value of 100 francs. If we presuppose 20 percent for the stable nucleus, 20 percent for foreigners, 10 percent for personnel and 5 percent in reserve, it would leave 45 percent of the stock for the OPV, or 4.5 million.

Will there be division of shares? The question is undoubtedly not settled, but on Rue de Rivoli they are very much afraid that the CCF's national notoriety and its good public image will earn it a flood of requests of a magnitude similar to that of Paribas, even though it is only about one fifth as influential as the big business bank.

The Bank of Building and Public Works

With the BTP, as later with the BIMP, we enter the category of smaller privatizations. No international issue here either, but on the other hand, the forming of a "responsible nucleus" more consistent than Paribas' "stable nucleus." The size of this bank, which may be worth around 300 million francs, may make it tempting prey for an OPA. Hence the government's desire to form a group of shareholders capable perhaps of holding up to one half of the capital. "Responsible" shareholders who, in the case of the BTP will quite naturally be looked for in the building and public works professions. The tender for forming this nucleus should be launched quickly, and the OPV can begin about 6 weeks later, in April.

The OPV could deal with about 35 percent of the capital (after 50 percent for the nucleus, 10 percent for personnel and 5 percent in reserve). At present, the BTP's capital is made up of 800,000 shares with a nominal value of 100 francs. A one-for-four division is planned, making it possible to obtain 3.2 million shares with a nominal value of 25 francs. Or, still with the same hypothesis, about 1 million shares offered in the OPV.

The SOGENAL

This subsidiary of the General Company, which holds 53 percent of it, will be the next to be privatized. The OPV should begin on 9 March or a little later and will be concerned with stock held by the state. There is no "stable nucleus" problem: the General Company will keep control of it. Currently, its capital is made up of 1.315 million shares with a nominal value of 200 francs. A one-for-two division was planned, but that will not be enough. Division will probably be by four, but no permanent decision has been taken.

In addition, an increase of capital is going to take place just before the OPV, subscribed by the General Company and the state. This operation, a neutral one for state finances, will cause the nominal capital to go from 263 million francs to 320 million. Which will make it possible to increase the amount of stock offered even while reinforcing the institution's own funds.

After this capital increase, and under the hypothesis of a stock division by four, the SOGENAL will thus have 6.4 million shares with a nominal value of 50 francs, a little over 3 million of them possessed by the state.

In the absence of an international issue, this mass of stocks is to be diminished by the 10 percent reserved for personnel and the envelope set aside for future bonus distribution. Eventually, someone could find himself, under this hypothesis, 2ith 2.3 or 2.4 million shares of stock presented to the OPV.

A regional bank, operating in Alsace and Moselle, the SOGENAL will be privatized as "regionally" as possible. The publicity campaign will be centered on Alsace, while the stock will be quoted at the monthly regulation of the Nancy Stock Exchange. Which will in no way prevent subscriptions in the rest of France.

The Private Industrial and Real Estate Bank

The problem arises in the same terms as for the BTP, and should find the same solutions (nucleus shareholders will obviously not be of the same origin). Today the capital is comprised of 314,000 shares with a nominal value of 100 francs, which are likely to be divided.

8946
CSO: 3519/82

BRIEFS

CORN SCANDAL RESURFACES--We have fallen into ridicule on a European level. That letter-ultimatum from the EEC vice chairman, Mr Christofersen, concerning the scandal of the Yugoslavian corn is murderous. Not only does the Community ask that the Greek Government return those 500 million drachmas, but it also compels us to investigate (us, not them) all of our activities during the last 3 years to determine whether or not something similar also took place: it gives us a 60-day time period within which we must fulfill all the Community's requests. Here is a case of cheating and falsification by a para-state company, and our prime minister is simply watching the developments, without jailing those "greens" [green is the PASOK color] who have made us the laughingstock of Europe. [Excerpts] [Athens POLITIKA THEMATA in Greek 6-12 Feb 87 p 10] /9274

CSO: 3521/92

LABOR UNIONS SEEK TO REVERSE DECLINE IN MEMBERSHIP

Report on Methods

Rotterdam NRC HANDELSBLAD in Dutch 18 Feb 87 p 14

[News Analysis by editor Mark Kranenburg]

[Text] Amsterdam 18 Feb--There was great excitement last summer in the trade union movement when the report "The FNV [Federation of Netherlands Trade Union] in 14 years" was made public. Everyone knew things were going badly for the trade union federation. For reports of declining membership were made for years at a time. In 1980 the unions affiliated with the federation represented over 1.1 million members; 6 years later that was hardly 900,000. Before the FNV report appeared, the drop in membership was explained with a simple statement. "That was merely inherent in the high unemployment." In other words: if it soon goes somewhat better again with the economy and employment, the FNV will grow again.

The working group responsible for the report "The FNV in 14 years," however, emphasized that the causes of the crumbling membership were much deeper. While the world changed, the FNV stood still, the message of the working group amounted to that. The rank and file in 1986 was a faithful reflection of the employed population in the fifties. The average FNV member was a man between 40 and 64 years of age and the sole wage earner.

But, meanwhile what is the trend of development? The composition of the employed population is changing, with the result that traditional trade union strongholds such as shipbuilding are disappearing. The process of deterioration continues: The VARA [Workers Radio Amateurs Association] member has no longer been a trade union member for a long time. Far-reaching individualization impedes, as the FNV expresses it itself, "the development of a collective employee identity." New work patterns arise, in the form of, for example, part time work and flexible labor contracts. All developments in which the FNV unions have been too little involved, was the gloomy conclusion of the working group.

Renewal

A new report has again appeared since yesterday. Again it is from the FNV working group entitled "The Changed Community and the Place of the Trade Union Movement in it," but now with proposals to actually renew the FNV. Still a chapter with misery or the analysis--the composition of the FNV membership seems to have deviated since 1971 from the rapidly changing composition of the employed population, the policy conducted has been too uniform--but for the rest it is a future oriented report. That appears also from the name "FNV 2000."

Consequently the FNV is going to be renewed or better said change its image. For in the presentation yesterday chairman Pont let no doubt exist: The character of the FNV will not change. If, as it says in the report: "Methods, style and means may change, the fundamental assumptions remain the same." The FNV is a trade union movement on a broad basis, Pont said yesterday. The main aims of the FNV will be in the future: work, income, social security and solidarity.

In the renewal process, the trade union federation wants to prevent its alienation from the still extensive rank and file. "Renewal of the FNV must be supported and carried out by the rank and file of over 900,000 members. They have made the FNV great. It is certainly also in their interest that it remain so." The present members are the pivot on which the renewal process hinges, according to the introductory chapter of the report.

According to the report, the FNV unions must especially become more recognizable. That will be possible to happen first of all in the plants, where they must develop "plant unions." The report does not say so literally, but the FNV should get away from the traditional distinction between blue and white collars. The working group writes "All employees--regardless of sex, educational level or nature of their job--must be included in the target group of trade union activity. And also to make those plant unions implicitly recognizable more scope should develop for promoting interests and increased emphasis on the interests of target groups."

Working more often with the CAO [Collective Labor Agreement] of the enterprises would still be a step further, but the possibility is not brought up in the report. According to FNV Chairman Pont there are no fundamental objections against this, but some practical ones. The FNV wants to prevent wages and other working conditions in a branch of industry from differing too much. CAO's in a branch of industry are the main instrument for that purpose. But according to Pont, besides that more scope should be created for agreements by industry.

The FNV also wants to increase its visibility in "the neighborhood." In practice, this means that the number of "trade union offices" will be increased. There every member or potential member can apply for general

information, for example, on taxes, social security and financing of studies, besides trade union matters. In short, the trade union movement will act as a service institute or the "social ANWB [Royal Dutch Touring Club]"

The most obvious suggestion in the report is undoubtedly the financial advantage for trade union members who become dependent on an unemployment benefit. A fundamental discussion has been conducted for years especially about this point in the FNV. FNV Chairman Pont originally opposed the separate treatment of trade union members, but he has been converted meantime. Apparently he has yielded to the argument that the trade union movement hardly loses members in those countries where social insurance benefits exist.

A similar organization will have to be brought about in the Netherlands, before something distinctive can be done for trade union members. Consequently the working group puts the proposal in the framework of the privatization of social security, in which employer and employee organizations take over responsibility for the benefits. However the discussion about privatization is running up against many difficulties. Employers and employees have been talking for almost a year in the Labor Foundation about the possibilities of managing the National Health Insurance Act themselves, but there is still hardly the beginning of a consensus.

Privatization of the other benefit regulations as well as the considerably more complicated Unemployment Insurance Act (where the trade union member's advantage must find expression) will still require infinitely much more time, if an agreement about that can be concluded. Perhaps it will be reached in the so magic year of 2000 for the FNV.

Editorial Comments

Rotterdam NRC HANDELSBLAD in Dutch 18 Feb 87 p 9

[Text] "The FNV 2000" is the title of the report which aims to be an answer to the loss of membership and the declining degree of organization which the largest trade union federation in the Netherlands has had to determine. The poorly disguised self-criticism which was conducted by a heavily manned working group under the direction of Chairman Pont tried to find out the causes of the decline.

It was decided that not only the reduction of employment and the drop in income must explain the loss, but also the changed composition of the employed population. In the internal report "The FNV in 14 Years" the working group came to the conclusion that the trade union movement had lost much of its attractiveness. The membership, so it was confirmed, is rather a reflection of the employed population of the fifties than of the eighties. Since 1971, the FNV membership seems no longer to have grown with the rapidly changing composition of the employed population.

The working group also ascertains that--as the economy develops favorably and employment increases--the degree of organization will not return of itself to the old level. How serious the loss of ground of the whole trade union movement is, appears from the fact that the degree of organization in the Netherlands has dropped from 40 percent in the seventies to 29 percent in 1985.

The working group says a thorough reorientation is necessary not to miss the boat to the future. In the final report it makes a large number of recommendations to coordinate policy and organization better with the workers, who make up an increasingly larger part of the employed population.

The starting point must be that the visibility and availability of the FNV in the employees' direct work and living situation is increased. Therefore the trade union federation wants to strengthen the position of the workers in the plant. Promotion of interests must be brought closer to the members.

That is undoubtedly a good recommendation. The increased attractiveness of, for example, organizations of leading personnel in some branches of industry has to be attributed to a considerable extent to the fact that they maintain offices in industries and at a concentration point like Schiphol. The FNV obviously wants to follow this example.

The question must certainly be asked whether the unions did not let the chance go by in the seventies to strengthen their position when they neglected to support and conduct trade union work in the enterprises sufficiently.

It generally must be confirmed that the trade union movement has placed its priorities too long in national economic policy and its involvement in central advisory and consultation organizations. The distance from the rank and file members has undoubtedly become continually greater because of this strategic choice.

In order to increase the attractiveness of the trade unions, the working group also proposes a national measure through which trade union members who are dependent on a social benefit, get something extra. The measure would have to be paid out of the wage area and would have to be separate from the extralegal benefits which are already in force (consider health insurance benefits), which apply to all workers.

It is understandable that the trade unions consider it unjust that their members pay for services which they perform for all workers. Their argument is that nonmembers benefit from the negotiation results which the unions manage to achieve. That applies even more so when the unions will be involved more than until now in the implementation of employee insurance and conduct negotiations about the amount of the benefit and the premium.

However, the idea that all workers must grant the trade union members a subsidy, as it were, on their contribution is difficult to accept. The trade unions again avoid with this the question how they themselves can become more attractive for the workers, for example, by providing extra services.

It is difficult to predict whether the recommendations of the working group will be successful. The emphasis lies in better cooperation, even with other trade union federations, more providing of services and a more varied form of promotion of interests which is better suited to the different groups of workers which the FNV wants to reach.

8490
CSO: 3614/41

COUNCIL OF MINISTERS RATIFIES IRAN TRADE AGREEMENT

Istanbul DUNYA in Turkish 15 Nov 86 pp 1, 7

[Text] Ankara (DUNYA)--The Council of Ministers has endorsed the minutes of agreement signed by M. Tinaz Titiz, the minister of state responsible for relations with Iran, during his visit to Iran last August. According to the minutes of the agreement, Iran has accepted Turkey's request to provide necessary facilities to Turkish contracting firms.

According to the minutes, the two sides will strive to overcome the mutual lack of information by the two sides and their respective firms and establishments concerning production capacity, export potential, the quality of merchandise, and so forth. All restrictive practices will be avoided in bilateral trade, and the Iranian side will take the necessary measures for the release of corresponding letters of credit within 45 days of the delivery of Turkish exports to Iran. In addition, the possibility of facilities for the exchange of goods between the two countries will be explored.

Efforts will be made within the framework of industrial and technical cooperation between Turkey and Iran to further increase cooperation in the construction of cement and refractory brick factories and in railcar and machinery manufacturing projects.

The minutes also refer to the agreements concerning an oil and a gas pipeline between the two countries, regarding which studies are currently underway.

13184/13046
CSO: 3554/123

ISLAMIC NATIONS 'COMMON STANDARDS' SET FOR 1987

Istanbul DUNYA in Turkish 15 Nov 86 p 3

[Text] Ankara (ANKA)--It is understood that the implementation of common standards with other Islamic countries will start at the beginning of the new year.

According to Hilmi Ismailoglu, secretary general of the Turkish Standards Institute [TSI], the TSI is working on establishing a "common standards institute" with 46 Islamic countries.

Ismailoglu pointed out that until such an institute is established, bilateral agreements will also be sought with certain European and Eastern bloc countries along with Islamic ones; he affirmed that "the Common Standardization Agreement signed with Iran will go into effect at the beginning of the new year."

Ismailoglu stated that, in accordance with this agreement, goods bearing the mask of meeting the standard of either country will be free to leave or enter the other without further scrutiny.

Pointing out that under current legislation, commercial goods moving between the two countries are subject to customs control both ways, Ismailoglu noted that this causes delays which affect the development of foreign trade adversely.

The TSI secretary general emphasized that the adoption of a common standard will be an important factor in harmonization with the EEC, and he said that it is aimed at achieving maximum economy in the implementation of common standards.

Ismailoglu reported that the implementation that will begin with Iran at the beginning of the new year will later be extended to Iraq, Syria, Pakistan, Egypt, Senegal, Austria, and Czechoslovakia as well. He said that efforts are being made to reach a similar agreement with Saudi Arabia and Hungary, and that an identity of views had been reached on the subject at the initial stage. The TSI secretary general said that through bilateral agreements standards will be harmonized if already in existence, and, if not, common standards will be developed.

Ismailoglu said that the implementation of these moves will place the development of trade with the countries involved on sound foundations and that the standardization of the goods subject to trade will ensure harmonization with the standards of European countries.

13184/13046
CSO: 3554/123

EDITORIAL CHIDES OZAL ON BUSINESS CRISIS

Istanbul TERCUMAN in Turkish 16 Nov 86 pp 1, 14

[Nazli Ilicak Editorial: "Let Them Go Bust..."]

[Text] During the period when the country was going through the tragedy of the bankruptcies among private bankers [Prime Minister Turgut] Ozal was rather imperturbable. Forgetting that the government had taken no measures to prevent citizens being tricked, he said things like, "Such high interest rates would of course have risks, my dear sir. The public had already gotten its investment back thanks to the high rates of interest...." The bankers went bust and, with them, went the savings.... Some banks were liquidated. And so the matter was resolved after a fashion.

Now, Ozal is taking a "bystander's view" of the current difficult situation faced by the private sector. He is saying, "He who cannot keep pace with the system goes bust. Bankruptcies are normal."

Just as it was once implied that "greedy savingsholders" and "tricky bankers" were responsible for the affair of the crashing private bankers, sloughing off any responsibility despite having started and supported the upward spiral in interest rates himself, Ozal is once again ascribing the fault to the private sector now. This, let us remind ourselves, is the sector that has committed its all to exert the greatest effort in the mobilization for exports; this is the sector that (according to official indexes) has raised prices less than the public sector; and this is the sector that has raised workers' wages more than the public sector.

Do the stagnation in exports, the high interest rates that inhibit the accumulation of capital, and the fast rise in the cost of foreign exchange have no part in the crisis in which we find ourselves today? The government has passively watched--even encouraged--a large proportion of the country's exports flowing toward the Middle East, which is an unstable part of the world. Some of the industrialists whose output was based on export prospects are finding themselves in a tight spot due to this contraction. Some have sold their goods but have failed to obtain payment for them.... Some industrialists, thinking that "there must be a limit to how much the Turkish lira may fall," have obtained foreign credit or used acceptance credit.... And when the Turkish lira tumbled downhill, debts swelled.... As a result of

high interest rates for credit, the industrialist who cannot turn his capital around several times a year finds himself facing a crisis. The government is watching this, too, sitting on its hands and advising that internal resources be augmented. But the resources are constantly pouring into the banks. Is it not the government's duty to ensure that bank resources are transferred to the economy at suitable cost? How can the private sector raise capital by selling shares in a market where the state itself is paying 50 percent net interest to borrow money? Is there anybody who can claim that there are high enough profit margins to pay the kind of dividends necessary for this?

The volume of money lent by banks is 6.5 trillion lira. It is being claimed that close to half of this, or some 3 trillion lira, constitute "bad debts." The government considers that an attitude of "let them do what they like, let them go bust" is a requirement of a liberal economic system. The truth is that a bad debt of 3 trillion lira is a huge national asset wasted.

We would hope that the matter will be cleared up before it leads to greater outrages and events reminiscent of the crisis which previously hit the private bankers' scene and that Ozal will relinquish the bystander's armchair to shoulder his share of the responsibility.

13184/13046
CSO: 3554/123

LEADING INDUSTRIALISTS VIEW BUSINESS DEVELOPMENTS

Union President, Factory Proprietor

Istabul HURRIYET in Turkish 16 Nov 86 p 17

[Interview with Halit Narin, president of the Turkish Confederation of Employer Unions and proprietor of textile factories, by Ugur Dundar; date and place not given]

[Text] Halit Narin took a quick look at the flight ticket handed to him by his secretary and said: "I enjoy resting at Marmaris on weekends. But this week, we had to keep changing our minds. Just like those who were behind the decree on cotton.... Ha, ha, ha.... What an extraordinarily bad move that was!"

Halit Narin, the voice of the Employer Unions and the proprietor of the textile factories with the highest turnover in Turkey, was highly critical of the decree on cotton that went into effect in October. "Turkey exports cotton worth $50-70 million a year.... The Money and Credit Council granted a premium to these exports. There were exactly four changes in the premium rates in one month.... And what was the result? A few groups and individuals reaped great short-term benefits. But the price of cotton used by a sector employing 500,000 workers suddenly shot up. In other words, groups that create added value, open up new employment areas and employ hundreds of thousands of workers were in fact punished. That is just not acceptable!"

Halit Narin, who suffered his fair share of the "shock effect" of the chain of foreclosures that broke out in October, responded with the "sharp" response for which he is known when he was asked, "The frequent changes over a brief period in the decisions concerning cotton exports must have been taken to impart a healthy pattern to the economy, don't you think?"

[Narin] "It is extremely wrong for a few people to get together some fine morning or evening and make decisions that appear right as far as they are concerned. The prime minister says, 'I know the economy well.' We, in turn, put our faith in him. But every worthy has his own style of doing things, so why on earth is he letting others carry out what is his job? Do we not count as much as a few merchants who profited in the cotton affair? It is a sad fact that the morale of those engaged in this market has suffered a setback.

Ever since the day that decree was issued, we have been paying a difference of 50-100 lira per kilogram to keep the economy on its feet."

[Question] Dear Mr Narin, it has been observed for some time that there is a difficult situation in the textile sector in particular. Can this lead to the banks also landing in a difficult situation later?

[Answer] An interesting question.... Now, look, if I were sick, how could you avoid being infected? You would either be infected by the worry or by the microbe.... In fact, it amuses me to think in terms of an analogy. We are all in the same boat. If the ship comes to grief, will the bankers on board just walk off onto dry land? Will they escape getting wet? Or will the ship's captain say, "Well now, boys.... I am getting off here; you will have to fend for yourselves"? No way! This is the ship of the country's economy.

[Question] Does that mean that the ship is headed for the rocks with the alarm bells clanging?

[Answer] The bells are tolling for all of us. Some dangerous signs that we are headed for the rocks have come in sight. We need to overcome them quickly.... How can one have inflation on the order of 40-50 percent year after year and then expect factories to make a profit? Now, that is not possible.... The annual turnover of the top 500 companies in Turkey amounts to over 50 billion lira.... To keep this wheel turning requires getting into debt on a large scale. A very serious malady has set in in all sectors due to capital melting away. We are at the initial stage at the moment. The disease will spread--not in a matter of days, but it will take not more than a few months, either. If the textile sector plunges into a serious crisis, no sector--including the banks--can avoid doing the same.

[Question] It is being claimed that companies are applying the credits they obtain to such areas as immovable property, for instance, rather than using them in the appropriate fields. The prime minister has gone so far as to say, "I suggested to them to sell their seaside mansions and use the proceeds as working capital. Those who responded profited."

[Answer] We, in turn, can say to the prime minister: "Why do you issue Treasury bonds with interest rates as high as 100 percent? Sell off [state-owned] factories instead. If a man has a factory, he could not shoulder its burdens even if he had not one but 100 seaside mansions and sold them off one after another. It is wrong to cast the burden of inflation onto the shoulders of the industrialists. This is like expecting a sickly person to be transformed into a Hercules by a single vitamin pill. Such a transformation is not possible. All my colleagues who have made investments in line with Turgut Ozal's policy are in dire straits. Those who have not invested are better off.... Now, you tell me who is doing the more beneficial thing: the industrialist who invests in his country or he who reaps the fruits of the investment without doing anything?

[Question] Dear Mr Narin, when we look at the lists of Turkish imports, we see that investment goods loom vary large in them. That means, therefore, that there are successful investors.

[Answer] You are right, but... to provide an example, let us take the issue of cotton textiles. At one time there was a tax-refund system in this field. Through this, the government kept our competitive position in the external world in balance. This is now lost. Compared with the 20-25 million lira electricity bills that I used to pay at one time, I am now paying 200 million lira. Interest on borrowings has risen from 50 percent up to 80 percent and more. The investor cannot cope with figures like this. That is to say, as in the case of the soccer player who is afraid of keeping possession of the ball, it is not fair to put the blame on the investor.

[Question] What do you think of the recent measures taken by the banks?

[Answer] The banks are making a mistake. Instead of making the economy work, they are bent on extracting bigger returns from the economy. The moment the executive boards of the banks say that no credit should be granted to the textile sector, the whole burden of the sector will come down on the banks themselves. Sometimes there are acts that come as a shock, are entirely unexpected, and are due solely to overzealousness! While people incapable of contemplating the economic consequences of and the problems created by such acts should not even be in banking, it is extremely odd that they should be thrust on the stage, as though a weapon were being put in a child's hand and he were being told to go right ahead....

[Question] But there are claims that the doubtful debts owed to the banks are snowballing and even that 3 trillion of the 7 trillion lira of credits are irretrievable. Are the banks not obliged to take serious measures?

[Answer] These, sir, are fairy tales.... I do not wish to think that the banking community in Turkey is capable of such mistakes.... If half of the bank credit has gone down the drain in a country, then it is not possible to talk about that country's economy or banking either. There are, nevertheless, some rumors. It is said that some of the banks are initiating legal moves to escape corporation and income tax assessments for the year by matching them with doubtful debts. If true, this is shameful.

[Question] Dear Mr Narin, so far as I can see, you are voicing the anguish of a serious crisis. What are, in your opinion, the measures that should be taken urgently?

[Answer] We are asking for a dialogue as a matter of urgency. If the dialogue were started today and the measures we want were taken, the problem could be solved in a matter of months. If the matter is postponed, its solution will stretch out into the years to come. We want to have talks with the prime minister, either bilaterally or in groups representing the various sectors.

[Question] But the prime minister is in the habit of taking businessmen with him on his trips abroad and having long talks with them in flight.

[Answer] My dear sir, talks that take place in flight, stay in the air.

[Question] Dear Mr Narin, it seems as if your morale is really low.

[Answer] My dear sir, the prime minister said we should tighten our belts, and as a nation we did so. Increase savings, he said, and do not borrow money; we complied. Inflation and the cost of credit will fall, he said; and we said, thank God for that.... We went ahead to invest.... Interest on credit rose to 83 percent; there was no fall.... It went up to 84; nobody came to the rescue.... It went to 85; no news.... It hit 86; nothing happened.... The exporter has lost his enthusiasm, the industrialist his eagerness, and the investor his zeal.

[Question] What are we left with, then?

[Answer] We are left with Mr Ozal, that is all....

Leading Businessman

Istanbul HURRIYET in Turkish 16 Nov 86 p 17

[Interview with Erdogan Demiroren, leading businessman, by Ugur Dundar, held in Demiroren's office; date not given]

[Text] In the wake of the "storm of foreclosures" that shook the business world last week, Erdogan Demiroren spoke with some bitterness, some disappointment, but also--where the future is concerned--with some optimism. In a statement on behalf of the 42 companies connected with the "Demiroren Group," this famous businessman said: "Bank credits again? God protect us.... May God never let us get close to a bank door. They made 50 million people the slaves of 132,000. A happy minority has been created in Turkey. It is essential to have the banking system changed!...."

In his office, an imposing place with its carefully selected classic furniture antique accessories, I addressed Demiroren: "It is claimed that you invested the credits you received in immovable property, utilizing them in this manner rather than as operating capital. What is your comment?" Here is what Demiroren, who has long been the subject of rumors that he has gone bankrupt or is about to do so, has to say:

[Demiroren] "It is true.... Credits were invested in immovable property. But this is not the way I used the credits I obtained. Many of the companies I bought already possessed immovable property. I obtained a large proportion of the immovable property, worth around 200 million lira today, in the 1978-80 period. This is because if one obtained, say, a billion lira's credit in those years, 250 million of this melted away in payments by voucher and due to inflation. Then, also, the sales of goods are on credit on open dates. One is thus hit a second time by inflation. Therefore, as a precaution, I went in for the acquisition of immovable property at the time. But I did not pay cash, I bought in 1-year installments."

[Question] Dear Mr Demiroren, is there any other economy in the world that operates in any manner like this? Can you point out an example?

[Answer] No... but what do we do? This is the way Turkey is!....

[Question] Fine, but it is being said that the Ministry of Finance and the Anatolia Bank have recently initiated proceedings to foreclose on your buildings.

[Answer] There is nothing of the sort, my dear sir. I am astonished at what is being written!

[Question] Are you saying, then, that smoke is billowing out where there is no fire?

[Answer] It is rumors that are billowing out. The truth is that I owe banks around 14.4 billion lira. I mortgaged against all my debts my immovable property whose value I mentioned a little while ago. I even sold my business building at Bahcekapi and my hotel at Gayrettepe some time earlier to pay off certain debts. I would sell today but there are no buyers! In fact, nobody is cash rich in Turkey; there are only those who were made rich by increased values. We had obtained a medium-term credit of 1,137,000,000 lira from the Anadolu Bankasi. We are now paying its installments. Anything else, foreclosure proceedings and so forth, are all lies. I had also placed 647 million lira's worth of property in mortgage.

[Question] Fine, but how is it that such news is being spread from the bank?

[Answer] God knows; I have no way of knowing. What should in fact be confidential secrets, what should be kept under wraps as banking practice demands, is leaking. Of course, debts to banks should be paid. But if the bank asks for a loan to be repaid before it is due, asks for it to be paid back immediately, then one has to say: Friend, you must ask for repayment to be made in accordance with the conditions under which the loan was made, over whatever period it was agreed on. To act otherwise, to ask for 1 billion lira to be repaid just because one has decided one does not like the face of a particular businessman, is not acceptable. Nor is there any question of foreclosure in connection with the Finance Ministry. We owe 113 million lira in taxes, that is all.

[Question] So you are saying that there are no problems?

[Answer] It is not that there are no difficulties -- there are! Everybody has difficulties. The man in the street has them, families have them, the banks have them and, quite naturally, the industrialist has them too. We shall have to put up with them until we get to better times.

[Question] Dear Mr Demiroren, there is a widely held view that your business affairs have not been going well for several years now. What is the source of these rumors?

[Answer] It comes from the rivalry between groups. Competition in our country is conducted not by producing quality but by knocking competitors! For instance, rumors concerning me--that I have gone bankrupt--began circulating

sometime between early March and late August every year. The reason is this, and it is very simple. Certain people go to the mountains in the winter and, holding on to their glasses of whisky, begin talking. "Did you hear, dear, Erdogan has gone bust!" they say. The same talk goes on at the Buyuk Klup in the summer. But, as you see, my dear friend, we are on our feet and solvent. My construction projects are in progress at this moment; in other words, I am not in a difficult position at all. Now, how would you like to see us send someone bust, right here? (Here he reaches for the telephone. I rush to stop him.)

[Question] Do leave it alone, Mr Erdogan. There are too many people going bust already!

[Answer] There will be bankruptcies and it is natural that there should be!

[Question] Who will go bankrupt and who will survive, in your opinion?

[Answer] We do not want anybody to go bankrupt. In fact, no businessman asks to go bankrupt. Investment is an obsession with businessmen. One may embark upon an investment from time to time even when he knows that it will go badly. We can compare it with an artist who, having just lost his father and mother, goes on the stage to go on with the show, to practice his or her art. Ah, you ask, who is now in dire straits. Well, God knows; those who attempted to invest using money borrowed at high interest after the 24 January [1980] decisions, without the necessary sensitive analysis, are now in a difficult position. With a skyrocketing dollar [against the Turkish lira], with rising interest rates, to invest and make a profit! No, that is not possible!

[Question] While you complain of rumors, are there any enterprises you have embarked upon that you wish you had not?

[Answer] I criticize myself regarding two of my companies. I should not have bought the refrigerator factory and the unrefined oil-producing factory, because there were establishments that had made a success in those fields and had captured the market.

[Question] Can one regard spreading one's resources over widely divergent fields and tying down cash in immovable property as a mistake?

[Answer] Nobody sold me businesses that were ticking over nicely. I always bought companies that were in difficulties. Some had been intimidated by anarchy and had thrown in the towel. Others had opted for getting their money out of the country illegally. The truth is that the industrialist who made investments in those years, that is in the years filled with anarchy and inflation, is a heroic figure because he chose to invest his capital in his country rather than take it abroad illegally. Should we have opted for accumulating Deutsche marks?

[Question] You opted for investment in immovable property!

[Answer] I will tell you why. The Turkish economy does not exist in isolation from the rest of the world. I took into account economic crises that might arise from external factors, that might come in the future, and acted accordingly. I made my investments keeping in mind the future of the people who have spent a lifetime working for me, so that I would be in a position to pay their salaries. It is just as well that I did, as I have no difficulties in this respect. Ah, yes, we--the business community as a whole--did make one mistake. In all the investments, we overlooked one thing: investing in people. Now we are suffering for it.

[Question] How long will this last, in your opinion?

[Answer] Until we adapt to circumstances to compete in world markets. There is no other way out.

13184/13046
CSO: 3554/124

GRAVITY OF NAVAL THREAT TO BALTIC APPROACHES ANALYZED

Koblenz MARINE-RUNDSCHAU in German Sep /Oct 86 pp 267-272

[Article by Hans Frank: "The Significance of the Baltic Approaches and Possibilities for Their Defense"]

[Text] In any discussion of NATO and the Warsaw Pact it is all too easy to focus on the Central European Front or the flanks in the extreme North or Turkey. The following article shows how the Baltic Approaches are a key area and how their loss could have disastrous consequences for NATO. The author, a German naval officer on the staff of the Supreme Headquarters, Allied Powers Europe (SHAPE), also outlines the possibilities for defense of this region and describes the forces available for this purpose.

According to the dominant Soviet military strategy, the Warsaw Pact is adapted to and prepared for operations designed to gobble European territory in the event of a war with the West. The goal would be to achieve rapid military successes in order to hinder the Atlantic Alliance's mechanism of communication and break up the political cohesion of the Alliance at an early stage.

The East would presumably begin by making extremely forceful, vigorous attacks on those regions whose possession would provide the most major contribution to its achievement of these military and political goals.

The question of whether the Baltic Approaches should be considered such a region must be analyzed from a military and political standpoint in the light of this area's significance for the Warsaw Pact and NATO.

Occupation of the Baltic Approaches would have the following military advantages for the East:

- It would enable it to reach the rear of the Central European front by water transport and amphibious landing;

- It would put within its grasp the possession of southern Norway and the rolling up of the northern front;

- It would provide a corridor for its offensive aircraft in NATO's rear area (enabling it to reach the aircraft carrier "Great Britain" in particular), as well as debarkation ports and rendezvous areas for reinforcements from the other side of the Baltic;

- It would give free access to and from the Atlantic for large surface naval units and submarines. This link to the ice-free harbors and maintenance facilities of the Baltic Sea would take on full significance only over the course of a more prolonged struggle for the Atlantic sea routes.

The primary political consequences of an early loss of the Baltic Approaches are that one member of the Alliance, Denmark, would lose vital territory immediately and that Norway would be under direct threat of a similar loss.

It is difficult to predict how Belgium and the Netherlands, both members of the Alliance who have troops stationed near the intra-German border, would react if their lands were relinquished to the Eastern attack with virtually no protection. In the extreme case these countries could be cut out of the Alliance, since there obviously would no longer be any logical way for them to defend their territory.

However, this would necessarily lead to the collapse of the northern portion of the Central European Front.

Based on these considerations, it may be concluded that the Baltic Approaches must be viewed as an area whose possession by the Warsaw Pact at the very beginning of a conflict would be of decisive significance. With rapid successes on the battlefield, the Warsaw Pact would also be able to break up the military defense and undermine the political cohesion of the Alliance.

Options for Attack

There are a number of plans of action by which the Warsaw Pact could take possession of the Baltic Approaches.

First, access by land with a push through Schleswig-Holstein to Jutland, including occupation of the Danish islands. The Warsaw Pact would, on a conservative estimate, be able to use about 10 divisions of offensive forces which it has standing ready in the GDR and Poland. The West, in contrast, has available only the Sixth German Armored Infantry Division and the 51st Home Defense Brigade, plus the Danish Jutland Division. An additional Danish major formation is also stationed on Zeeland, although this is largely designated for mobilization. This imbalance would make it necessary to dispatch reinforcements early on. These troops, who would be coming from Great Britain and North America, have been factored into the defense strategy. The problem would be how to get them there safely and in time.

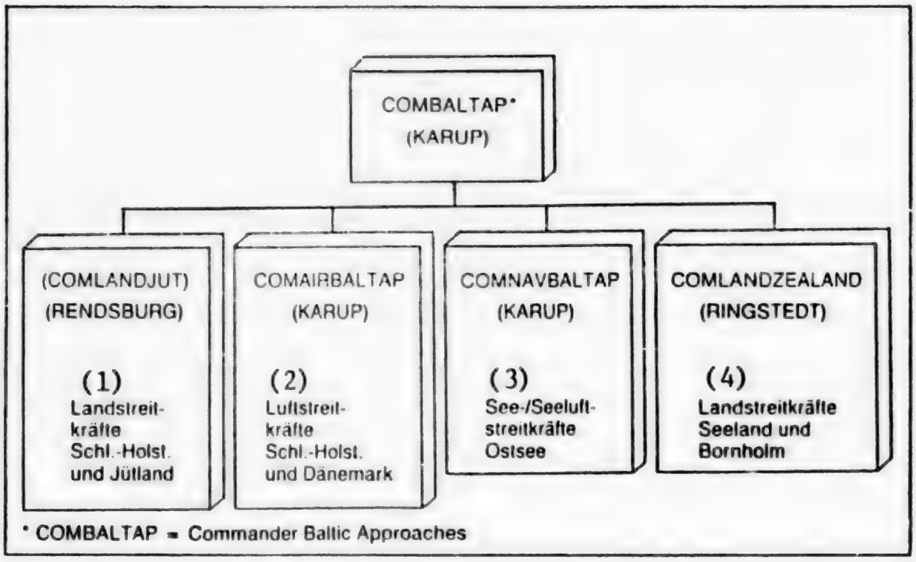
The second possibility is an amphibious landing with support from airborne troops in the area of the Danish archipelago. The Warsaw Pact has specially trained troops from the Soviet Union, Poland and the GDR available for such a maneuver. Their landing boats would be able to carry these units to the coast for a single amphibious landing: this would be 7,000-8,000 men and associated heavy equipment such as tanks and artillery. Light and medium naval forces of the Warsaw Pact's Baltic fleets, with their naval aviators, could be used to form a naval force covering a limited area for a limited period of time to suipport such a landing. These forces would be faced by the Danish and German naval units deployed in the Baltic Sea.

The third possibility is a combination of the above two options which would include the simultaneous cutting off of NATO supply routes in the North Sea in order to block reinforcements. This must be considered the most likely plan, although it offers the attacker maximum prospects of rapid success, since the defense is splintered and the broad field of action prevents the build-up of a point of main effort. The amphibious landing and advancement of the land front complement each other in that the defense's rear is threatened by the landing, while the army units keep the NATO naval forces away from the bases and prevent them from protecting the coast, as well as threatening the naval airfields.

A look at the map reveals another option, however, in the form of an offensive through southern Sweden. This hypothesis is supported by the Soviet Union's interest in this region, which has become public as a result of submarine operations.

Organization of Defense

To meet the need for a wide-ranging but coordinated and tightly interlocking defense, the responsibility for defense in the region of the Baltic Approaches has been put in the hands of one individual. The commander-in-chief, Baltic Approaches (a post traditionally occupied by Denmark), whose headquarters are in Karup, is responsible for the centralized planning of operations and the introduction and absorption of reinforcements. He coordinates the activities of the commanders-in-chief of the army, navy and air force acting under him, positions filled alternately by German and Danish officers. (This does not apply to the commander-in-chief, Zealand, a post occupied exclusively by Danish officers; even in peacetime this command is not included in the NATO chain of command.)



NATO defense structure.

Key: 1. Ground forces, Schleswig-Holstein and Jutland
2. Air forces, Schleswig-Holstein and Denmark
3. Naval/naval aviation forces, Baltic
4. Ground forces, Zealand and Bornholm

The Danish and German fleet commanders-in-chief (FOD = Flag Officer Denmark, FOG = Flag Officer Germany) operate under the commander-in-chief of the navy. This combination on the operational level of personnel from national armed forces and the NATO command ensures unified leadership and a smooth transition from peacetime to defense.

Most importantly, however, it provides continuous, reliable, seasoned leadership in times of crisis, when the political will of the member nations of the Alliance must be made explicit by clear, appropriate actions. Naval forces are unequalled as a means for the unequivocal expression of this political will. A prerequisite, of course, is that they be trained to implement policy decisions correctly and in the sense intended by the leadership. This can be achieved only through many years of trust and cooperation.

Undersea Defense

Ground forces are unable to initiate their defense until the enemy has crossed the intra-German border. A navy, on the other hand, has the advantage of being able to use the non-territorial waters of the ocean to marshal forces.

This is especially advantageous for submarines. Quiet, maneuverable submarines specially developed for operations in coastal waters, with high weapon effect and equipped with wide-ranging sensors, would hinder the Warsaw

Pact in its approach to a large-scale landing. They would also have the mission of making it difficult for the enemy to use the Baltic as a "runway" for its resupply operations and for bringing up reinforcements. The ferry runs that were recently initiated between Memel and the island of Ruegen and the efforts to forge a further bond between the Soviet Union and Schleswig-Holstein illustrate the importance that the East ascribes to this transportation route.

Despite their small numbers, the German and Danish submarines combine numerous capabilities in terms of escort protection, guarding of inshore waters, and submarine detection, capabilities which could otherwise be used for offensive missions.

Marine fighter bombers and fast patrol boats will have to bear the major burden of defense in inshore waters. Due to the short approach routes for the Warsaw Pact (it would take only 5 or 6 hours for an amphibious assault formation to get from the Bay of Pomorze to Moen), high readiness and rapid deployment capability will be necessary in order to reach the battlefield in time.

Since the Warsaw Pact would have the initiative at the very beginning of a conflict, it would be able to build up superior numbers over a limited area for a given period of time. Western forces must therefore be able to prevail against the opposing naval and naval aviation forces and inflict such heavy losses that the enemy is no longer able to make a landing, or is able to do so only in greatly reduced numbers.

This defense is strengthened by a series of minefields, both in shipping lanes and of those sections of coast suitable for an amphibious landing.

However, although this mine defense would theoretically be highly effective, its actual effectiveness may be limited by the fact that in the event of a conflict with a very short warning time, it is questionable whether all the minefields could be laid.

Furthermore, once the minefields have been laid, the forces present must protect them against the minesweeping units stationed in great numbers on the eastern side. This again requires that combat units be present and deployable, and these units, of course, would then be unavailable--or available only to a limited extent--for other missions.

And finally, traditional mines would have little effect against the East's steadily increasing numbers of air cushion vehicles.

Most of the bases in the Baltic region are extremely vulnerable to enemy air attack, to commando operations just before or at the outbreak of hostilities, or to the advancing land front in the course of a conflict.

This forces naval units to deploy early and to bring logistical support with them to the dispersal areas. This floating supply arrangement ensures base-independent operations, makes for flexibility in the employment of

forces, and largely ensures the survivability of the units during the first phase of a war which may have been initiated by surprise attack.

Securing of Reinforcements

What is true of German and Danish submarines in the Baltic is equally true of the Warsaw Pact in the North Sea: It would be able to station submarines promptly on resupply routes and, by means of these submarines and massive mine-laying, to disrupt the channels of communications and thus hinder the prompt delivery of the necessary reinforcements to Schleswig-Holstein and Jutland.

These mines guarding ports or landing sites can be laid by aircraft or submarines, or covertly by the state-controlled commercial vessels of the Eastern block that ply these waters in large numbers.

Consequently the West must not only protect supply and reinforcement traffic against submarines and aircraft by means of destroyers and frigates, but also must provide a mine-free route to enable this traffic to reach its destination. This is the mission of the mine countermeasures vessel in the North Sea.

From this it can also be concluded, however, that the stationing of a majority of Eastern submarines in the North Sea must be taken as an indication of possible aggressive intentions on the part of the Warsaw Pact.

This is naturally only one of a wide range of possible indicators; however, in view of the significance of reinforcements for holding the land front, the detection of foreign submarines in the area of direct supply lines is extremely important. Surveillance of this area of the ocean by antisubmarine aircraft and additional units must therefore be considered an especially important aspect of peacekeeping operations by the navies of neighboring countries. The same would, of course, be true of the early detection of any concentration of Eastern amphibious landing units in the Baltic.

Command Capability

One more aspect should be considered. While the aggressor can pre-plan his operations in detail and allow them to unfold precisely, without any substantial intervention by command personnel, the defender must react to enemy actions. This presupposes the obtainment of the most comprehensive information possible on enemy positions and deployment and makes necessary the ability to evaluate this information rapidly and deploy friendly forces with flexibility, virtually in real time. This would make it possible to gain the initiative on the battlefield, brake the enemy's momentum and disrupt his pre-planned action.

With its automated headquarters and its data processing systems and communications equipment, the German Navy has in recent years instituted progressive and consistent new means of offsetting the other side's advantage in terms of initiative by minimizing reaction times on the operational level, in tactical applications, and in relation to weapon systems.

Outlook

To summarize, the Baltic Approaches can be said to play a pre-eminent role in the NATO defense. In view of the limited resources, it would scarcely be possible to shift additional forces to this area, however logical and necessary this might be, without leaving other areas impermissibly exposed. Furthermore, Denmark, for political reasons, refuses to have foreign troops stationed within its borders during peacetime. Thus, in addition to possible improvements in the combat effectiveness of the armed forces in the foreseeable future, one of the most essential tasks of the naval forces of neighboring countries would be to bring over the planned reinforcements quickly and safely. Safety advances in antisubmarine operations will probably take the form primarily of improved position-finding equipment and more effective antisubmarine systems--through the use of submarines, for example. In terms of mine countermeasures, it is important to improve minehunting and especially to guarantee comprehensive surveillance of Eastern-bloc ships in times of crisis. An increase in the quality of mine countermeasures is not to be equated with improved geographical coverage, however. Because of the numerous ports and access routes in the region of the Baltic Approaches, the current large number of mine countermeasure forces must be maintained, even with additional modernization. This need to keep the number of combat units at its present level also applies to the forces that would bear the brunt of an offensive against the Baltic Approaches. The German and Danish Navies will thus have to maintain and modernize their various types of explosive ordnance. It will also be necessary to develop weapon systems further with respect to "command capability" and "combined arms combat" and to use data processing and transmission systems to a greater extent than ever before. Care, of course, must be taken not to overspecialize naval units or to optimize them for a particular mission in a given marine theater. The scope of action for naval commanders is greater--and thus the intended deterrent effect on the opposition is more impressive and at the same time more credible--the more naval units available throughout the theater of operations can be used unrestrictedly and are combat-ready and effective.

On the other hand, this provides adequate prospects of success in holding the Baltic Approaches by conventional means without having to resort to nuclear weapons for direct defense--a situation which is in the interest of the neighboring countries, in particular.

13114/12948
CSO: 3620/131

INTENSIFIED MILITIA TRAINING STRESSES SMALL UNIT LEADERSHIP

Vienna TRUPPENDIENST in German Dec 86 pp 569-572

[Article by Col Roland Vogel: "Points of Emphasis in 1987 Training"]

[Text] Introduction

Using as a starting point those points of emphasis decreed by Army headquarters in prior years, the following areas will be the ones in which further refinement will be sought in 1987:
-- realistic, drill-type training in conjunction with training of functional units and team training starting at the earliest possible moment;
-- leadership qualities of the instructors, but also of the commanders, with the objective of being persuasive and serving as an example not only in military expertise, but also as an individual;
-- militia work, which in recent years has undergone remarkable positive development. The objective here is to continue in the same direction, while furthering "combat unity" among our militia troops.

One point should however be firmly emphasized in this introduction. Further improvements in training and militia activities will come about only if other contingents cooperate; for instance, monitoring by commanders at all command levels, administrative simplification, elimination of bureaucratic excesses and an increasing awareness of the fact that the human element is the centerpiece of all our actions.

Statements and guidelines to that effect can be found in the "Order of the Army Chief of Staff for the Enhancement of Operational Readiness and Credibility of the Army." Practical application of this order would go a long way in the right direction.

Implementation of Training

Starting in 1987, it is intended to put maximum emphasis on combat exercises as well as drill training at squad and platoon level.

One misunderstood implementation of goal-oriented training has in the past led to merely "checking off" individual training and intermediate objectives out of the required context.

However, training for militia purposes requires the use of training methods which are so intensive and pervasive and which promote confidence in the use of arms and equipment to such an extent that the "forgetfulness quotient" remains as low as possible. Drill training, in which combat-type events are intensively practiced, are an appropriate method for this.

Another opportunity for improvement consists of making greater use of the time available for basic training for functional and weapons training and to shorten the general basic training period. For this purpose, a number of troop exercises are planned for 1987, based on studies ordered by corps commands. Included therein are efforts to reduce the number of training groups in the militia parent regiments.

The procedures necessary for award of the "combat service badge" proved appropriate during 1986 and constitute a good contribution toward competition-oriented training. In 1987 it is proposed to conduct an evaluation of procedures used to date, with the intention of awarding citations to those units which particularly distinguished themselves, particularly those which involved the cadre.

However, award of the combat service badge is not everything.

Rather, it is intended to serve as an example and incentive for demanding types of training, as they will increasingly become necessary in all areas of basic and unit training; several excellent precedents already exist for this.

A representative example for several projects is the intention of the Armed Forces Noncommissioned Officers School to introduce in 1987 a high-performance practice movement from the Drau to the Danube for the Staff Noncommissioned Officer Course, which is to include foot marches, motorized and air transport.

The basic principle involved is this: day-to-day training of a company, on occasion in conjunction with other companies, must become more intensive, demanding and eventful.

This entails a mandatory leadership attitude which appeals to our young soldiers, generates their enthusiasm and fully involves them. Unfortunately, needless-appearing hardships usually occur not so much as a result of justifiable demands, but from negligence, lack of solicitude and contempt on the part of superiors toward their subordinates.

Leadership Training

Those necessary improvements which are desired in basic training require for their implementation some special attention within the framework of officer and noncommissioned officer training, for the career as well as the militia staffs. For this reason, increased and closer attention must be paid to questions of training, leadership and the use of appropriate training methods and leadership attitudes. Training objectives for this area have been stipulated; all that is needed is their implementation.

Noncommissioned Officers' Training

Noncommissioned officers' training, established in 1984, was vigorously pursued in 1986 at all levels. The largest qualitative improvement probably occurred at the Armed Forces Noncommissioned Officers School. Great demands are made there. Any graduate of this course possesses the best possible prerequisites for accomplishing his duties as a noncommissioned officer--the Army will be able to determine the positive results of this within the not-too-distant future. Maximum emphasis for 1987 will be on improvements in the teaching and application of combat-realistic training methods, in defense policy training and in leadership.

The old "C-Training," which is totally inadequate for military requirements, must be continued until 1988/89 so as to achieve a smooth transition.

First experiences with the new noncommissioned officers training appear fully positive. While this initiated a qualitative improvement of our noncommissioned office corps, there is still a lack of measures to deal with military justice, personnel structure and personnel planning. An expert commission appointed by the Defense Ministry will make recommendations in these areas before the end of 1986.

Militia Noncommissioned Officers Training

The number of noncommissioned officer functions required for the expansion phase will be achieved only if it will be possible to train 3,000-3,500 militia noncommissioned officers per year.

At the present time, "Implementation Regulations for Militia Noncommissioned Officer Training" are being written, which are to become effective in 1987. They will establish all training procedures leading to qualification as a militia noncommissioned officer.

-- the "normal career," which leads from basic training with primary unit training to unit training and troop exercises;

-- the career leading from basic training as a long-term trainee, which is expected to lead to qualification of highly-trained militia noncommissioned offices, inasmuch as extended training is involved;

-- the career which includes the first part of one-year officer volunteer training, which is tantamount to qualification as a squad leader. The stigma of a "quitter," who aspires to be "only" a noncommissioned officer, should be discouraged; the command functions involved at this stage are just as important and just as vitally needed;

-- the "catch-up career," which is a means for covering part of the steadily increasing overall requirement and for which there is an increasing number of applicants (about 300 per year). At the same time, the decision for admission to the catch-up career is being delegated to troop commanders;

-- the career involving service outside the country.

Militia Officer Training

For 1987 training planning, the required training facilities were obtained at the Theresian Military Academy and at the weapon and specialist schools.

The availability of advanced continued training seminars at the military academy was put to good use in 1986; about 400 militia officers participated in them. For 1987 the availability of such training has been increased considerably.

A Militia Training Bulletin was published in 1986 and will again be widely distributed in 1987.

For 1987 the permanent militia staff at Army headquarters plans a greater number of initiatives designed to provide information to employers in trade and industry as well as to local governments. These are intended to promote better understanding for militia matters in general and for militia unit training in particular.

Leadership in the Armed Forces and in the Economy

Our militia forces constitute the largest training facility for leaders. Military leadership training of our militia units indirectly benefits our economy also. This insight, which has been second nature in Switzerland for a long time, will in our country require a lot more emphasis inside and outside the armed forces. This of course represents a challenge to all authorities and training facilities involved in militia unit training.

Our efforts will be supported by properly conducted courses providing a high level of training and optimum utilization of the available training time. A great number of positive reactions bear witness to this.

On the other hand, poorly managed courses do double damage--and unfortunately there are justified complaints on the part of some course attendees.

In the first place, poorly trained leaders will accomplish their missions in poor fashion; secondly, this removes credibility from our efforts of demonstrating the mutual benefits between military and civilian leadership training.

Conduct of the Leadership

"The conduct of our cadres among themselves and their attitude toward our soldiers must have two main characteristics:
-- orders must be appropriate to the mission;
-- a great deal of mutual respect for personal dignity and caring." (Excerpt from the regulation concerned.)

Our militia force is more than ever before in need of creative comradely "role model superiors." There are enough guidelines, directives and orders on this subject. Nevertheless, severe infractions occur in the area of leadership behavior and we are not able sufficiently to create the role model function.

The guideline, "the human being is of central importance in any action," is being overshadowed by a great number of other interests and impacts.

Making heavy demands and providing great solicitude does unfortunately often turn into making few demands, and providing a minimum of solicitude.

Continuous efforts must therefore be made and a major point of emphasis must be devoted to make our cadres capable of truly meeting these high personal goals.

The contribution of training in this area for 1987 is planned in the form of additional seminars for leadership and training methodology for the instructors of Noncommissioned Officer Courses 1 and 2. There will be a requirement during officer and noncommissioned officer training to provide increased and appropriate influence and training with respect to correct leadership conduct.

The true test for our armed forces vis-a-vis the public, and therefore the measure for their acceptance, consists, apart from military expertise credibility, in their capability of interacting in a persuasive manner. This does not cost any money, but requires an attitude, and in many cases, a change in personal conduct. In selecting and training of cadres which is to take place in the future, the meeting of this challenge will have to be given special significance.

Militia Associations, Militia Activity

An evaluation of militia association activities based on the 1985 work program shows a satisfyingly large number of events conducted by militia associations.

The regulation concerning militia associations became effective in 1984. By 1985, militia associations had already been founded in 45 percent of all mobilization battalions.

The 1986 evaluation has not yet been completed, but there is still an upward trend, estimated to have reached about 60 percent. The goal for 1987 is to further promote this most favorable development.

Personal involvement of the commanders of mobilization troop units is responsible for this success, as well as readiness on the part of a considerable number of militia officers to contribute some of their additional free time.

It will be important to extend gradually this readiness and this willingness to become involved to the militia noncommissioned officers.

Such complaints as there are concern involved bureaucratic procedures, in some cases also a lack of understanding on the part of military authorities. Strong efforts are required to eliminate these conditions.

However, these unpleasant deficiencies are outweighed by a largely positive overall evaluation of militia activities in general and the formation and support to militia association in particular.

One of the main concerns for the coming year will be the support and promotion of militia associations as a contribution to combat team work, of a sense of belonging and camaraderie in our militia troop units.

The competition for best militia association, started in 1986, will be continued in 1987. Special evaluation criteria for this will be the integration of noncommissioned officers and militia firing.

Critical Remarks

The best of guidelines for training, the best intentions and capability for realistic, eventful combat training keep coming up against obstacles based in other areas and which apparently can be dealt with either with great difficulty or not at all. We would be dishonest if we did not mention them. The roots of the evils which hamper training include some of the following: the overtime rules; the difference in service obligation period between the cadre and the basic trainees; external influence factors in personnel decisions; leave regulations for extended-duty soldiers, which reduces the one-year volunteer training to barely 11 months (while we continue to have to fight for every unit training day); better pay for continuous-service soldiers, which we do not really want, but no financial incentives for militia noncommissioned officers, for whom we have a desperate need; and the pay differential between militia and career cadres in troop exercises.

To bring these things up is to court unpopularity and can entail disadvantages, because it is considered disturbing in some quarters--but it is true nevertheless. Only if we can muster the courage and the strength to create regulations in these areas also which are primarily devoted to the interests of the service and training, will it be possible for the efforts in behalf of training to score a breakthrough.

Final Remarks

An ambitious training program, which gives equal billing to the "how" and the "why," which not only indoctrinates pour soldiers with confidence in accomplishing the military mission but which also makes it obvious to them what we consider worth defending, is the best contribution we can make every day to convincing our society, and especially our young people, of the logic of our defense mission. The best of public relations cannot be a substitute for this.

The establishment of the militia component of our armed forces is a "task of the century." It gives us an opportunity to fully integrate our armed forces into the population and to let our army reach a size which gives us credibility in implementing our area defense. No one should be able to shirk this task.

In closing, let me quote a statement by the commander of the Swiss air and air defense troops, Corps Commander Wyler:

"The deciding factor of a commander is his personality. The militia system provides us with an opportunity to find leadership personalities which we cannot approach by way of the career military."

9273/12913
CSO: 3620/151

ANTITANK HELICOPTER PURCHASE MOVING SLOWLY TOWARD DECISION

Brussels DE STANDAARD in Dutch 2 Jan 87 p 3

[Article by Dirk Achten: "Army Helicopter Purchase Drags On. Service Wants Reliable, But above All Affordable Helicopter"]

[Text] Brussels--The army's helicopter purchase has been on the military shopping list for years now. At various times chiefs of staff and defense ministers have emphasized different points, and wrangles between Flanders and Wallonia and lately an acute shortage of money have led to one postponement after the other. The army staff still believes, however, that the helicopters are necessary if the army corps in Germany is to have a reasonable chance of victory in time of crisis. But the emphasis is clearly on affordability now: it will have to be an existing helicopter of proven reliability and affordable operating costs. The question now is whether the helicopter purchase decision and funds allocation can take place in 1987. Because the Saint Anna cuts have faced defense planners with tough choices in what they are to purchase.

In 1978 the army staff began to study helicopter requirements. A year later the results were presented to the then chief of staff, General Gontier; a year after that they landed on the desk of the minister of defense, at that time Charles Poswick. Poswick had no objections, but it still took another 3 years--until 1983--for the file to be presented once again, still waiting for a decision, to Defense Minister Vreven. But this time too, nothing happened.

Ever since the decision to purchase an additional 44 F-16 fighter aircraft, Flemish manufacturers, organized in FLAG (Flemish Aerospace Group), have been demanding the lion's share of the contracts for the helicopter purchase as a way of letting Flanders catch up with the rest of the country in terms of contracts awarded. In 1983 Vreven was up to his neck in the jeep question and all kinds of community wrangling, which he could not find a way out of.

In addition, the Walloons were in no hurry to purchase the helicopters, which were branded as Flemish. The Flemishness of the purchase received all too much emphasis through Sikorsky's plan to build a helicopter factory in Flanders if it got the contract. A great many mayors and aldermen did not lose a second in demanding the factory for their city. The Sikorsky proposal also received a great deal of support from Gaston Geens, chairman of the Flemish government.

The Sikorsky helicopter, the H-76, is a large, sophisticated, and therefore expensive machine. Some in the army were afraid that once again it would be the military that would have to purchase inordinately expensive equipment for economic reasons. The cost-saving idea of Lieutenant General Segers, the then army chief of staff, also dates to this period. He proposed having the helicopters transport small antitank teams armed with portable Milan missiles. The helicopters themselves would not need to carry very expensive weapons. This idea has the advantage that even if politicians decide to purchase inordinately expensive helicopters, it will not do the army in, because the initial purchase will not include the "options"--among which will be the weapons systems in this case. They can be added later.

Backbone

The General Staff calls antitank weapons the backbone of Belgian defense doctrine. The 60,000 Belgians in Germany are responsible for the defense of 60 km. They face superior Warsaw Pact armored forces. It would be irresponsible of us to send Belgian soldiers to Germany, to what could be the firing line, without giving them the possibility of defending themselves adequately. The nation faces a choice here: Either we do it, and in that case we do it right; or we decide that we cannot take on the defense responsibility.

The most common antitank weapon in the Belgian Army is the Milan guided missile. There is also the JPK (Jagdpanzerkanone), a 90-mm antitank cannon mounted on a Leopard tank chassis. But the General Staff wants to add a third antitank dimension to the arsenal: the antitank helicopter.

The General Staff's nightmare is that a large concentration of Soviet tanks might break through a weak spot in the defense line. The other means of defense would be caught off guard, it would be necessary to react quickly. At a moment like that the command on the ground has to be able to respond by committing reserves. That is the moment par excellence to use helicopters, to stop the breakthrough or at least slow it down considerably.

Belgium cannot, sources in the General Staff continue, rely on helicopters from friendly NATO countries (West Germany, the United States) to accomplish this. In such crises each tactical commander will want to hold on to his own reserves, and the Belgians must not count on other countries making reserves available to them. That is why Belgium needs its own antitank helicopters.

Air Force

Matters are different with aircraft. The Belgian Air Force is integrated into 2 ATAF (Allied Tactical Air Force) and thus operates as part of NATO. Aircraft have a large operating radius and area, and a fixed base. Helicopters, on the other hand, are part of the army (smaller operating radius, no fixed base, closer to the front), because they are always used in connection with ground troops. In contrast to aircraft, helicopters do not operate as part of an integrated NATO command.

But these distinctions are growing vaguer. In the United States helicopters are already being outfitted for air combat against enemy helicopters. The difference between the missions of helicopters and aircraft is growing smaller.

Twenty-eight of the 46 helicopters Belgium intends to purchase are to be armed, while 18 will be used for reconnaissance purposes. Naturally the reconnaissance helicopters are much cheaper, because they do not carry expensive weapons.

The Defense Ministry staff declares that there can be no thought of exceeding the planned budget for the helicopter purchase. If for various reasons it is decided to purchase a more expensive machine, the Defense Ministry says that other ministries (e.g., Economic Affairs) will have to come up with the additional costs. Furthermore, it is not just the purchase that has to come in on budget; the same is true of operating costs as well.

The General Staff rejects the idea that Belgium might participate in research programs for the "helicopter of the future," primarily for financial reasons. The Belgian helicopter will have to be an existing, operational one. There is no interest in experimental helicopters, because the risk is much greater, and in addition the operating costs of such a machine are unknown.

These requirements (on budget, no experiments, operational) are music to the ear of certain helicopter manufacturers. The German firm MBB (Messerschmidt-Bolkow-Blohm), in particular, is feeling encouraged after the despair of recent years. MBB is very active in making contacts with Belgian companies. The MBB helicopter (model BO-105) has been in use in the West German Bundeswehr for some time already and, moreover, is very affordable in comparison with its competitors. MBB is now a leading contender, along with France's Aerospatiale. Aerospatiale offers the military version of the Dauphin, a machine not yet in operational use anywhere; the Ecureuil for reconnaissance; and the Gazelle as a cheaper antitank alternative. The Gazelle has the disadvantage of having only one engine, however.

According to several experts, it appears that the helicopter question is more and more being linked to the order for ECM equipment for the F-16. The ECM purchase is a matter of priority for Defense Minister de Donnea, and a decision could be made next year. So once again things are getting a bit tense for the helicopter manufacturers.

12593
CSO: 3614/33

'WIESEL' AIRBORNE AFV NEARING PRODUCTION PHASE

Bonn WEHRTECHNIK in German Jan 87 pp 50-52

[Article by Wolfgang Dobinsky: "Wiesel 1 Armored Fighting Vehicle"; first paragraph is introduction]

[Text] The development of the Wiesel 1 TOW/MK armored fighting vehicle (AFV) has not proceeded without its ups and downs, as the project director in the BWB [Federal Office of Defense Technology and Acquisition], Senior Planning Officer Wolfgang Dobinsky (graduate engineer), depicts in the following article. In many respects the Wiesel is an unusual project of the Motor Vehicles and Equipment Technology Department, dealing as it does with a vehicle of extremely small dimensions which was developed specially for airborne units and therefore must be airportable in units of two as an interior load, or singly as a slung load for a CH-53 helicopter. Four Wiesels must be able to be carried by the C-160 Transall transport aircraft.

Initial steps were first taken in 1972 to replace the Kraka, which is currently operational as an AFV with airborne units. During the course of this work, extensive concept research with wheeled and tracked chassis was undertaken. The Wiesel concept was selected. Within the scope of the development six prototypes were built, three each equipped with the MK-20 and TOW, with which the necessary technical trials and service tests were conducted. The development was then halted in 1978; for various reasons it was not introduced into the Bundeswehr at that time.

After several years' interruption, the concept phase for an AFV was ushered in with the issuing of the Operational Requirement of 11 March 1983. On the basis of a previously conducted market analysis, Porsche's armored tracked vehicle Wiesel and Daimler-Benz' armored wheeled vehicle (G-Model) were to be tested as to their suitability as an AFV.

The following requirements were to be fulfilled by the carrier vehicle:

--Sufficient cross-country maneuverability (at least equal to that of the Iltis);
--Airportable by the CH-53 (two AFV's);
--Airportable by the C-160 (four AFV's);
--Protection for the crew to the extent that the requirement for loading for air movement permits;

--Proof of system-compatible integration of the TOW and automatic cannon weapons systems:
--Availability as of 1989.

The air transportability of two combat-ready AFV's with crews had priority even ahead of the basic requirements of firepower, survivability, maneuverability and armor protection.

This requirement determined the technical specifications:

--External dimensions and location of center of gravity;
--Limited weight;
--Crew;
--Weapons and ammunition supply;
--Regulations for aviation equipment;
--Off-road maneuverability;
--Extremely low ground pressure;
--Small silhouette;
--Lashing points on the hull;
--Safety equipment on the fuel system.

To ensure sufficient room for further development in the utilization phase, it was necessary to reduce the maximum combat weight from 3,000 kg to 2,750 kg.

The Concept Phase

Because of a ministerial decision in late 1983, no contracts were let within the scope of the concept phase. To keep the project going nonetheless, an agreement was reached between the General Army Office and the BWB to carry out the following concept research within their official jurisdiction (with participation by private industry at its own expense). In essence, this concept research was concerned with the following principal exclusion criteria:

--Airportable in the CH-53;
--Firing with a 20-mm automatic cannon;
--Maneuverability at least like the Iltis.

For the requisite research, a modified engineering development model of the Wiesel from the initial development phase and a preliminary working model of the G-Model were available. Following evaluation by the General Army Office, the BWB and the Army Material Command Porsche's tracked vehicle Wiesel was selected.

Salient characteristics of this concept are:

--Ballistic protection;
--Extremely low combat weight;
--Extremely low ground pressure;
--Airportability both as interior and slung load;
--East road transpor. (two Wiesels can be transported with one 10-ton truck);
--Great road and cross-country maneuverability;

--Low noise generation;
--Small dimensions and low silhouette;
--Ammunition supply;
--A single chassis for both the TOW and MK [automatic cannon] versions.

Wiesel's New Technology

Due to the delay from 1978 to 1983, the commercial components first used were no longer available. In addition, the Operation Requirement of 1983 contained a considerable number of new requirement . Beyond that, weaknesses from the initial development were to be eliminated.

Table 1 shows the essential differences between the situation at the time of the discontinuance of development in 1978 and the new technology based on the new requirements in accordance with the Operational Requirement. It is evident from this that the extent of this work represents such a far-reaching revision of the system that one can compare it to that of a new development.

The Wiesel is a front sprocket-drive vehicle with a longitudinally-mounted powerpack and driver's seat situated to the right of it. The vehicle's rear compartment is variable and, in addition to accepting the TOW and MK-20 system, usable for other kinds of missions as well.

The extremely low specific ground pressure permits operation in terrain with low ground surface shearing strength in relation to the substructure. The Wiesel can thereby travel over stretches of terrain in which battle tanks can no longer operate.

Main Components

--The powerpack is packaged in such a way that it can be test-run even when removed from the vehicle;
--Track and suspension consisting of eight rollers with endless rubber band tread, driven by the front sprocket;
--Self-supporting steel-armor hull;
--Automatic cannon, type Rh-202 DK-6 by Rheinmetall, mounted in a 1-man turret, type E 6-II-A1 by KUKA, with periscope sight PERI Z 59 without WOE, suitable for night combat;
--TOW 2 antitank rocket system, suitable for night combat, with a range of up to 4,000 meters.

Powerpack

The powerpack consists of a commercially available 5-cylinder, turbo-charged VW diesel engine with an output of 64 kilowatts, a 3-speed automatic transmission by ZF [Zahnradfabrik, Friedrichshafen AG] with a supplementary 2-speed reduction gear by Porsche, a Cletrac steering gear, as well as a liquid cooling system and air filtration system.

In evaluating the powerpack, not only did weight, volume and the specific power-to-weight ratio have to be considered, but also the appropriate gear

steppings. That this was successful is shown by the traction power listing in Table 2.

The Developmental Phase

After the Military-Technological Economical Requirement was issued on 2 April 1985 and the appropriated funds released on 30 April 1985, the development contract with Porsche became legally binding on 7 June 1985. The further development of the Wiesel under extremely limiting conditions was thus ushered in:

--An 18-month period of development to include technical trials and service tests;
--Development to a fixed price.

Although the scope of the developmental work was large and the timing situation critical, the contract was concluded without including provisions of Paragraph 1.1 (the so-called Best Efforts Clause) and 5.5 ABEI [General Stipulations for Development Contracts with Industrial Firms].

An Optimized, Technically Balanced Solution

The product of the development can be described as an optimized, technically balanced solution. This is particularly evident in the case of the Wiesel 1-MK. In spite of the firm supports, they succeeded in reducing the overall height--overwhelmingly important in loading into and unloading from a helicopter--by about 180 cm. The weapons system can now be operated under protection.

To compensate for the components which add weight to the vehicle--the diesel powerpack, the hull roof and the automatic cannon turret--the use of a new steel armor was necessary as well as the continued use of light-metal materials in the area of the track and suspension and the powerpack.

Wherever possible, commercially available components were used.

After development to the point of series production has been completed in 1987, the series producer will be determined by competitive bidding. Delivery of the first Wiesels to the forces is planned for 1989. Of the 343 weapons carriers planned for the Bundeswehr:

--Some 190 will be Wiesel 1-TOW versions (an additional 20 as a circulating reserve); and
--Some 120 will be Wiesel 1-MK versions (an additional 13 as a circulating reserve).

Table 1. Wiesel's Old and New components

Component	As of 1978	As of 1986
Engine	4-cylinder spark-ignition, 73.5 kw/100 hp	5-cylinder turbo-charged diesel, 64 KW/87 hp with governor device (complies with Motor Vehicle Registration Ordinance)
Fuel system	For spark-ignition fuel	For diesel fuel
Cooling system and electricity	For spark-ignition with converter shaft-clutch	For diesel engine with automatic and group transmission
Transmission	5-gear converter shaft-clutch transmission	3-gear automatic transmission, 2-gear group transmission
Transmission extension drive	For converter shaft-clutch transmission	For automatic and group transmission
Track drive	Mono-drive surface	Duplex-drive surface
Track	For biwinged guide tooth	For triwinged guide tooth
Bogey wheels, track return roller	For biwinged guide tooth	For triwinged guide tooth
Hull	Open roof	Enclosed roof with weapons mounting
TWO Weapons system	TOW	TOW 2
Aiming mechanism	Optical sight (day)	Optical sight (day) AN/TAS-4A (night)
Electrical supply	Batteries	On-board power supply system
Mounting	Pedestal mounting with 473 mm elevation track	Undercarriage with 120-mm elevation track
Automatic cannon weapons system	MK-20 DM-5	MK-20 DM-6
Aiming mechanism	PERI-Z--11 (day) BM-8001 (night)	PERI-Z-16 (day) BM 8025 (night)

Mounting	Pedestal mounting	Turret
Radio	SEM 35	SEM 80

Table 2. Technical Data for the Wiesel 1 Weapons Carrier

Specification	Wiesel 1 TOW	Wiesel 1-MK-20
Combat weight	2.75 tons	2.75 tons
Crew	3-man	2-man
Overall length	3,265 mm	3,469 mm
Width	1,820 mm	1,820 mm
Overall height	1,870 mm	1,956 mm
Specific ground pressure	3.5 Newton/square cm	
Specific steering ratio	1:1.23	
Service brakes	Fully hydraulic dual-rotor disk brakes	
Hand brakes	Mechanical	
Steering	Hydraulic steering brakes on Cletrac reverse transmission	
Suspension/ stabilization	Torsion bars, hydraulic attenuator, limit stops	
Track	Endless rubber band	
Maximum speed	80 km/hour	
Minimum cruising speed	Approximately 4 km/hour	
Gradient	60 degrees	
Fuel	F-54 diesel fuel	
Engine	5-cylinder, turbo-charged, type 069, 2-DE	
--Output, DIN [German Industrial Standards] rating	64 kW (87 hp) at 4,500 rpm	
--Maximum torque	172 Newtonmeters at 2,800 rpm	
--Displacement	2,000 cubic cm	

--Cooling	Liquid cooling	
Specific output	23.3 kW/ton (31.6 hp/ton)	
Transmission	3-gear automatic transmission 2-gear group transmission 6 forward/2 reverse	
Electrical system	24-volt working voltage	
Weapon	TOW launch system	MK-20 DM-5-7 on mount, type E6-II-A1
--Traverse	+/- 45 degrees	+/- 110 degrees
--Elevation	+/- 10 degrees	-10 degrees/+ 45 degrees
--Firing height	1,795 mm	1,612 mm
Night vision equipment		
--Weapons system	AN/TAS-4	BIV telescopic sight (PERI Z59 w/o WOE)
--Driver	BIV periscope	BIV periscope

13238/12913
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CO_2 LASER OFFERS GREATER OPTICAL SAFETY FOR MILITARY USE

Bonn WEHRTECNIK in German Jan 87 pp 55-62

[Article by Klaus Mueller: "Military Lasers Provide Greater Optical Safety"

[Text] Along with nuclear engineering and semi-conductor electronics, lasers have forged a broad application base in their first 25 years as a key technology; now they are taking their place in the military technology of the Federal Republic of Germany with the introduction of the weapons systems for the M113 artillery reconnaissance tank, the GEPARD anti-aircraft gun tank, and the Leopard 2 battle tank. The possibilities for military application of laser technology extend from minuscule semi-conductor lasers used in communications engineering to the low-energy laser range-finders to high-energy weapons lasers. The most important solid-state laser in military use is the neodymium-doped: yttrium aluminum garnet laser (Nd:YAG), which is finding broad application as a laser range finder. However, since this laser is not optically safe, it is necessary to maintain a certain safe distance. This factor has been eliminated with the newer lasers, as reported in the following article by government engineer Dipl.-Ing. Klaus Müller, Specialist for Laser Technology in the Federal Office of Military Technology and Procurement. In particular, the CO_2 laser offers many advantages for military applications.

Aside from weapons lasers, experience using laser beams is becoming more and more a routine military activity. Laser range finders, laser target designators, laser missile guidance systems, and laser duel simulators are all systems that come into play in almost any modern military maneuvers on the battlefield, at sea, or in the air.

Modern weapons technology as applied to state-of-the art weapons systems can no longer get by without the split-second speed of the precise laser beam. With the demand for ever broader system range, laser technology provides the advantage that measuring accuracy is totally independent of the distance between the source and the object being measured.

Consequently over the course of time the laser has assumed a prominent position in both the East and the West as a central component in modern weapons guidance systems. Thus development work in the laser area commands special attention on both sides of the Iron Curtain.

ND:YAG Lasers Require a Safety Distance

Based on the development of the ruby laser to the Nd:Glass laser, the so-called Nd:YAG laser has evolved into the most important solid-state laser used in military engineering. This type of laser is distinguished by:
-- Considerably better optical quality of the crystal,
-- Better mechanical and thermal characteristics,
-- Lower laser threshold.

They are used everywhere today where compact, powerful lasers are needed, for instance in the LEOPARD 2, the GEPARD, the M-1 ABRAMS (USA), the AMX-30 (F), and the CHALLENGER (GB), among others.

The Nd:YAG laser operates at a wave length of 1,064 µm and is generally used as a pulse laser (high performance laser), which means it typically transmits laser pulses of about 10 nanoseconds duration and one megawatt pulse power.

The disadvantage of this type of laser--and of many others as well--is that the beam can cause severe eye damage. The completely "noiseless" and invisible infrared laser pulse poses an extreme danger for the human eye because there is no natural protection against it. This means that the entire laser beam striking the cornea of the eye passes directly into the interior of the eye. The 1-µm beam is hardly absorbed at all as it passes through the eye; in fact it is even further focused by the lens effect of the eye. This process projects highly concentrated energy on the retina, leading to permanent "holes," which in a worst case scenario can lead to total blindness.

As a result, it is necessary for each observer to maintain a nominal optical hazard distance (NOHD) when using any laser that is dangerous to the eyes. When using a typical Nd:YAG laser range finder for tank fire control systems, the nominal optical hazard distance for the observer must be about 1 km, and can even amount to several kilometers for observation using optical magnification equipment in front of the eyes (binoculars). Consequently explicit safety distance guidelines have been worked out for all dangerous laser beam wave lengths that might be used. These regulations must be taken into consideration wherever lasers are used and are listed in the NATO Standardization Agreement--STANAG/3606.

The beam can be adjusted using a strong step-down filter so that the expanded NOHD amounts to only a few meters, but it is necessary to hang reflective foil on the target. In normal maneuvers, the attachment of reflective foil is omitted because this would constitute an unrealistic battle situation.

The possibility of outfitting all the soldiers in the field with antilaser goggles has also been rejected for tactical reasons.

Thus we are still faced with the problem that during laser operation--without the necessary damping filters--each observer has to maintain the appropriate safety distance, depending on whether or not binoculars are used.

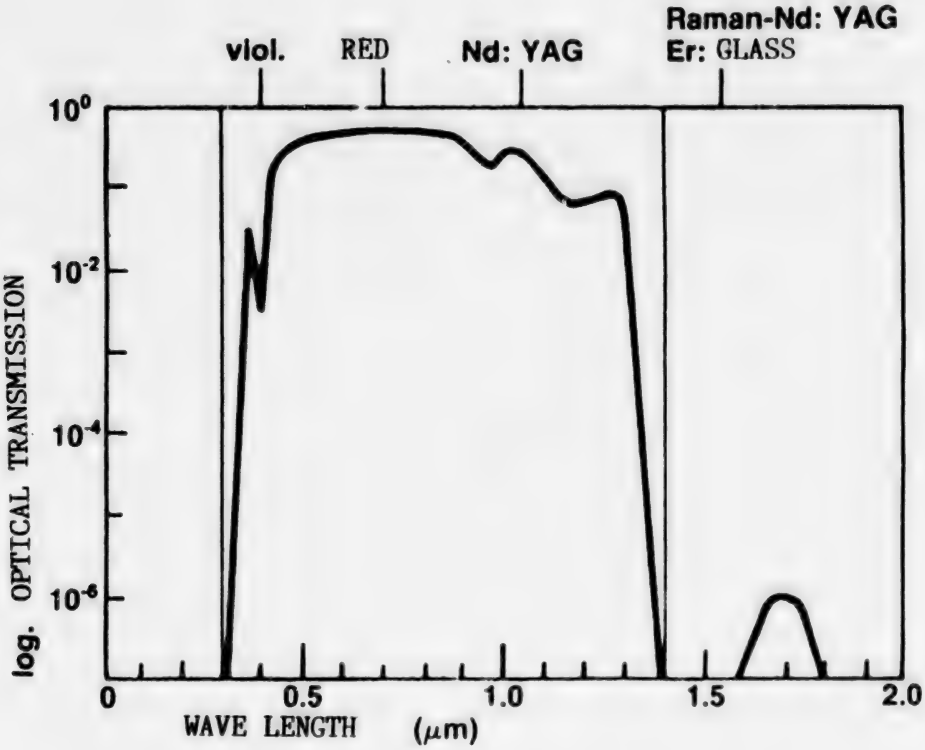

Figure 1: The frequency range of maximum optical danger is limited by the wave lengths 1.35 μm and 2.2 μm. Below 1.3 μm, the laser causes damage to the retina because the lens of the eye focuses the beam on the retina in this frequency range. The resulting energy concentration is about six orders of magnitude greater than the energy concentration on the cornea and other tissues. At wave lengths over 2.2 μm the cornea heats up. Tests have shown that maximum optical insensitivity lies at a wave length of about 1.5 μm. Observe the cut-off filter effect at 1.4 μm.

The Need for More Optically Safe Lasers

In order to eliminate the difficulties associated with limited training operations, there is a strict requirement that future laser range finder development feature more optically safe lasers, e.g. class IIIa lasers (NOHD = 0). This need has ushered in the development of second-generation lasers, which possess not only greater optical safety, but increased performance and battle value as well.

The domestic industry, supported by research grants, has oriented itself quickly to the situation, with the result that today we enjoy the availability of a series of optically safer, higher-performance lasers.

The following types of lasers operate in the wave length range offering the maximum optical safety (1.35 - 2.2 μm):

-- Raman-Nd:YAG laser
-- Erbium:glass laser
-- Holmium:Tm:Er:YLF-lasers, or Ho:Tm:Cr:YSAG/YSGG) lasers.

In terms of laser type, all three of these are Q-switching solid-state lasers; the active laser medium is in one case a garnet that has been doped with holmium, thulium, and erbium atoms, or in the other case a phosphate-glass substrate that has been doped with erbium atoms.

Raman-Nd:YAG Lasers

Raman-Nd:YAG lasers take advantage of the so-called raman shift technique, which makes it possible to displace the wave length by about 500 nanometers into the optically safer spectral range.

The Q-switched Nd:YAG laser mentioned at the beginning of the article (for instance like the one used in the LEOPARD 2), in which the laser active medium consists of a neodymium-doped yttrium aluminum garnet crystal, is used here as the pump laser. To put it simply, the optically dangerous 1.06 µm beam of the Nd:YAG pump laser is fed through a cylindrical tube. The tube is filled with methane gas pressurized to about 70 bar. If the space occupied by the methane gas along the beam path in the raman cell is configured as an optical resonator, a coherent beam is formed. This "stimulated raman process" generates a beam in the "raman cell" with a wave length of 1.54 µm and an efficiency factor of about 40%.

Thus it looks as if a retrofit from the YAG to the raman-YAG would be very advantageous because current Nd:YAG lasers could still be used. To put it simply, the only thing needed is to add on a raman cell in the optical path of the beam to convert the beam into the optically safer spectral range. In this process, the raman cell acts as a passive component which, as a hard-sealed system, requires no maintenance. Because of the welded construction of the gas tube and the terminal lens, we anticipate service lifes up to 10 years.

The same applies for passive-operating Q-switches. The so-called "plastic dye," which is opened by the laser light itself, has been used successfully for years for Q-switching in Nd:YAG laser technology.

Erbium and Holmium Lasers

At the present time it is still necessary to used mechanical (rotating prism for Er-lasers) or electro-optical ($LiNiO_3$ crystals for Ho-lasers) switches for the long-wave range. These switches often have the disadvantage that as active components they are more prone to failure, take up more room, and are more expensive than passive components. For this reason great attention is currently directed at the production of a saturatable absorber for the 1.5 µm range. When the appropriate passive Q-switch becomes available, there are good chances of providing a technically mature Er-glass laser comparable to the Nd:YAG laser that would still be more cost-effective for military applications. Nonetheless, it would then be necessary to adopt the appropriate measures to correct limitations which exist because of the lower degree of efficiency.

	RUBY	Nd: YAG	Raman Erbium	CO_2
μm	0.694	1.064	1.54	10.6
J/cm^2	$5 \cdot 10^{-7}$	$5 \cdot 10^{-6}$	1	$1 \cdot 10^{-2}$

Figure 2a: Maximum permissible radiation strength (energy concentration) on the human eye (according to STANAG 3606)

LASER RANGE FINDER FOR GROUND-TO-GROUND APPLICATION

	$\varnothing_e$ (mrad)	PFF (Hz)	NOHD (m)	10 × 50 (m)	Laser CLASS
Nd: YAG	0.5	1 Hz	1262	6141	III
		10 Hz	2055	8223	III
		20 Hz	2383	8972	III
Raman/ Erbium	0.5	1 Hz	0	0	III A
		10 Hz	0	131	III A
		20 Hz	0	215	III A
CO_2	0.5	1 Hz	0	0	I
		10 Hz	11	0	I
		20 Hz	11	0	III

LASER RANGE FINDER FOR GROUND-TO-AIR APPLICATION

	$\varnothing_e$ (mrad)	PFF (Hz)	NOHD (m)	10 × 50 (m)	Laser CLASS
Nd: YAG	2.5	1 Hz	290	2124	III
		10 Hz	510	3239	III
		20 Hz			
Raman/ Erbium	2.5	1 Hz	0	0	III A
		10 Hz	0	27	III A
		20 Hz	0	45	III A
CO_2	2.5	1 Hz	0	0	I
		10 Hz	0	0	I
		20 Hz	2.2	0	III

Figure 2b: Nominal optical hazard distances for laser operations according to STANAG 3606 with and without the use of optical magnification (10 x 50), for two typical applications at three different pulse train frequencies (PFF). It is assumed that:

-- The diameter of the beam emitted is 4 cm for Nd:YAG, raman, and erbium, and 7 cm for CO_2

-- $\varnothing_e$ = the natural beam divergence

-- Radiant energy: 25 mJ for Nd: YAG, 15 mJ for raman/erbium, 100 mJ for CO_2

-- Atmospheric extinction coefficient $0.27 \cdot 10^5$ (cm^{-1}) for 1.064 μm, $0.22 \cdot 10^5$ (cm^{-1}) for 1.54 μm, $0.19 \cdot 10^5$ (cm^{-1}) for 10.6 μm (corresponding to 10 km visual range)

In particular, thermal effects are augmented with an increased pulse repetition rate. This means that both with the conventional Nd:YAG laser and the more optically safe raman, Er- and Ho-lasers, adequate heat dissipation is absolutely necessary for high-pulsing lasers.

The problems are most evident with the erbium laser because of its relatively high laser threshold. When lasing with glass rods and high pulse trains, it is necessary to take into account the possibility of additional, non-linear optical effects, such as self-focusing (which frequently leads to the destruction of the laser rod). For application as a ground-to-air laser range finder, which requires six to ten pulses per second, the flash lamp and the laser rod should be equipped with an effective fluid cooling system. This also applies for raman lasers, although in this case it is also necessary to circulate the gas in the raman cell continuously in order to stabilize the beam profile.

For ground-to-ground applications, where pulse trains of 0.5 - 1 Hz are completely adequate, laser transmitters can be operated without any cooling features.

CO_2 Lasers

Among the optically safer types of lasers, low energy carbon dioxide (CO_2) lasers have been considered for some time to be particularly promising for the future. In this case, optical safety and wide application range seem to have united in a "universal laser" appropriate for military applications.

The wave length of the CO_2 laser beam lies in the extended infrared range at 10.6 µm because of its low-energy radiative transitions. This provides additional advantages in most applications. For one thing, CO_2 lasers offer the possibility of serving as an active component to complement passive thermal imaging devices (8-12 µm range) to serve as an active/passive reconnaissance system in the third atmospheric window. This means, however, that it becomes necessary to ensure compatibility with the thermal imaging device so far as range and atmospheric transmission are concerned.

On the other hand, with CO_2 lasers optical lenses absorb a great deal of the 10.6 µm radiation, which means that normally the danger limit is not increased for observers using optical magnification in front of their eyes.

Nonetheless, this property is problematic for the development of CO_2 lasers because transparent optical components have to be made out of semi-conductors or alkali halide crystals.

CO_2 laser technology as a whole makes h[illegible] demands on the developer. The transition between civilian lasers and military lasers is not going to take place as easily and quickly as was the case with solid-state laser technology. In the civilian application range CO_2 lasers are being used in so-called continuous-flow operation, that is they are connected to the right size of gas reservoir to provide for continuous gas exchange during operation, thus ensuring stable laser activity.

For military application in a battle scenario, we would generally need a "hard-sealed," compact CO_2 laser with the highest possible service life (a million laser shots).

Major Development Considerations for the CO_2 Laser

The appropriate development programs have been started up for working out the special CO_2 know-how needed for industrial production of the CO_2 laser in the Federal Republic of Germany.

To meet the needs of different areas of CO_2-laser military application, various classes and types of lasers are required, for instance, continuous lower power lasers such as the optical beam rider-transmitters or local oscillators, or pulsed high power lasers for range finding. Special types of excitation are required in these cases in order to attain optimum performance, degree of efficiency, and compactness.

Major research considerations include:

-- Electrode arrangement, spacing, and form,
-- Transverse and longitudinal discharge systems,
-- Homogeneous excitation over the entire cross-section,
-- Interaction of flux density, gas pressure, and electrical field strength,
-- Preionization systems to obtain homogeneous discharges,
-- Discharge and high-frequency excitation.

The resonator configuration determines the beam parameters (divergence, mode structure) of the laser beam, but also has an influence on the output parameters (energy, power, degree of efficiency). By using frequency-selective resonator elements, it is possible to influence the laser's spectral behavior. In the case of the so-called waveguide (WG) laser, even the discharge channel constitutes part of the resonator, whose sides are hard-sealed in this case.

The following problem areas remain to be solved:

-- Optimum resonator type (stable, instable, waveguide)
-- Resonator configuration (mirror radii, spacing, and reflectivity)
-- Waveguide materials (long-term performance under the influence of laser discharge)
-- Transverse mode control
-- Longitudinal mode control (in heterodyne applications)
-- Control of polarization direction (in heterodyne applications)
-- Grid tunability.

In spite of the comparatively high degree of efficiency afforded by the CO_2 lasers, it is necessary to provide for heat dissipation in pulse and continuous beam lasers with high repetition frequencies. Future research plans have as their goal the production of compact, high-performance cooling systems that will impair the stability of the laser as little as possible. The following factors must be researched:

-- Heat exchanger concepts,
-- Cooling media,
-- The influence of cooling on frequency stability.

In "sealed-off" CO_2 laser operation, service life can be extended by regenerating the laser using a specifically activatable catalyst. CO_2 lasers for ground-to-air application require permanent gas circulation because of their higher pulse rates in order to ensure reproducible conditions from pulse to pulse. The service life limit for "sealed-off" operation is reached very rapidly in the kHz range, hence in this one case continuous partial gas exchange becomes essential.

Immediate research plans are concentrating on:
-- Selection and testing of catalyst materials,
-- Determining the required gas circulation rate,
-- Gas supply and determination of the required gas flow-through rate in non-sealed systems.

Introduction of CO_2 lasers in heterodyne systems (laser-radar) requires that the laser beam on which the radar is to be impressed exhibit a high degree of relative frequency stability. It is necessary to develop an effective stabilization system for practical heterodyne operation. Research is required in the following special areas:
-- Mechanical and thermal stability of the resonators,
-- Repetition accuracy of the laser line after it is turned on,
-- Microphone affects,
-- Application of various active stabilization circuits.

CO_2 laser applications that carry information and data transmissions require controlled intensity or pulse/pause modulation. Possibilities include a pulse excitation modulation, external modulation using continuous wave lasers (CW-lasers) and pulse lasers with long pulse duration, and modulation using an active Q-switch with CW-lasers. The following problems need to be researched:
-- Time-jitter with excitation modulation,
-- Modulation depth, beam quality with external modulation,
-- Time-jitter, beam quality, constant intensity with Q-switch modulation.

With regard to the goal of using lasers in military devices and later mass production of CO_2 lasers, research work is concentrating particularly on the following aspects:
-- Reliability,
-- Reproducibility,
-- Weight,
-- Compact design,
-- Service life,
-- Shelf life,
-- Cost-effective production.

Problems arise in several areas:
-- Materials availability,
-- Use of controllable processing technologies in the glass/ceramic sector, for instance sintering techniques.
-- Use of glass fusing and glass soldering techniques in association with vacuum technology for "sealed off" laser tubes,
-- Production of bonds and seals in substrates using metallization instead of adhesives,
-- Component construction and design, for instance sandwich techniques to obtain high-quality surfaces and color registration for waveguide lasers.

However, development work is not limited to the transmitter side. Mercury cadmium telluride (MCT) detectors are usually used as receivers. Disadvantages include their low reception sensitivity and the need to cool the detector to 77 K. Gas cylinder cooling is out of the question here for logistical reasons. Consequently MCT detectors have to be cooled to the necessary temperature using very complicated, expensive cooling machines. Based on wave length compatibility at 10.6 μm, detectors and some optical components are useful in principle for both the thermal imaging device as well as for the laser. Working from this consideration, possible solutions are currently being sought for connecting the CO_2 laser as closely as possible with the thermal imaging unit, which means:
-- Using a common reception channel (with a separate laser transmitter),
-- Common use of a thermal imaging-serial detector component as a laser receiver.

For later installation in a fire control system (for instance EMES-15/18), it is also necessary to take the following factors into consideration:
-- Package dimensions,
-- Interface capability to the fire control system, as well as simple retrofit capability,
-- Retention of the director mirror dimensions,
-- Retention of essential outside dimensions of the thermal imaging unit and the EMES center section,
-- As little change as possible in the common module assemblies.

Experiments have tested the functional viability of two variant solutions:
-- The laser beam is coupled out spectrally in the afocal system of the thermal imaging device. Then the laser beam is directed via an intrinsic optical system to a thermal imaging serial detector component.
-- The same thermal imaging scanner or IR-imager is used for both the laser beam and the thermal imaging beam, a scan position sensor compensates for the scanning movement, and a thermal imaging device serial detector component serves as a detector.
Practical design of these concepts has proven somewhat problematic.

The mutual influence of the beams on each other has an especially detrimental affect on laser reception, making it necessary to employ a narrow-band filter for 10.6 μm radiation and a common module supplemental detector component in order to realize the design. This means that the only common components left are the thermal imaging/CO_2 laser reception channel and the cooling machine for the thermal imaging serial detector and the supplemental laser detector.

The necessity of using a detector cooling system with the CO_2 laser, whether with or without the thermal imaging device, makes so-called stand-by operations necessary, which means that the cooling machine has to operate on a 24-hour basis.

CO_2 lasers do have their grave disadvantages:
-- Detector cooling requires an initial cooling time and stand-by operation,
-- Poor remission characteristics with wet targets,
-- Short operating service life and shelf life,
-- Higher development costs.

Nonetheless, they do possess some advantages in addition to optical safety that make them ideally suited for military application:

-- Heterodyne capability; the possibility for highly sensitive laser-radar,
-- Good atmospheric transmission, particularly through natural and artificial fog,
-- Great type diversity for both continuous and pulsed lasers.

Based on the required compatibility between common-module thermal imaging devices and laser range finders in the 8-12 µm range, CO_2 lasers will be the primary laser used in new weapons systems (for instance the # 90 combat vehicle). The solid-state lasers will continue to be the design of choice where compact, high-power lasers are to be used in standoff applications, for instance hand-held lasers, portable target location devices.

For the distant future, even current development work in non-linear optics indicates that the laser of the future will no longer be fixed at a specific wave length. Conversion of the laser beam using special crystals would allow us to build lasers with a wide tuning range (for instance holmium lasers on $AgGaSe_2$ crystals with a tuning range of 2.5-12 µm.

Thus third generation lasers will not only be optically safer, but will also be compatible with optical media in the second and third atmospheric windows.

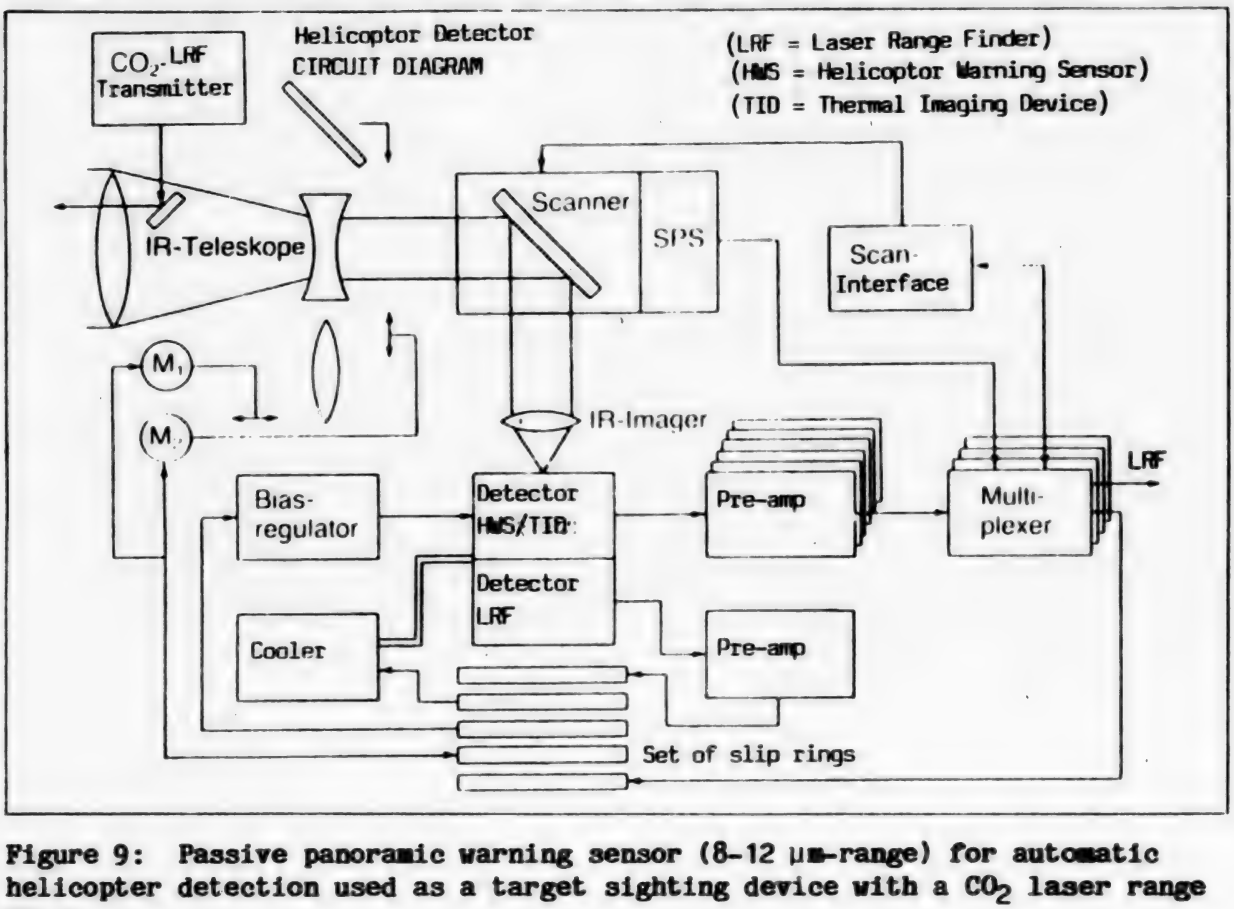

Figure 9: Passive panoramic warning sensor (8-12 µm-range) for automatic helicopter detection used as a target sighting device with a CO_2 laser range finder

13127
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FLOATING BRIDGE COMPANY TESTS RO-RO TANK LANDING IN BALTIC

Bonn HEER in German Nov 86 pp 2-3

[Article by Andreas Alt: "Ferries Challenge Baltic Waves"]

[Text] Close to the horizon, a single, thin red strip of light stretches across the night sky, while three ferries are being cleared to leave the Lehmbeker harbor on the North Sea-Baltic Sea Canal. The headlights on the trucks shine on the large, box-shaped boats. The crew has to wait for sunrise because they are not allowed to enter the canal any sooner.

Until then there are still a few things to be done. Under the direction of NCO Peter Busch, the engineers attach red and green position lights to the superstructure of Ferry # 8 and set up a radio connection on the command bridge.

Just as the first ships appear on the artificial waterway, the company commander Captain Friedrich Ruppenkamp issues the order to push off. Ferry master Corporal Michael Wersig gives instructions to the motor operators--called "Schottel-operators" after the motor manufacturer, the Schottel shipyards in Oberspay on the Rhine--to maneuver the ferry in the canal. Two motorboats accompany the floating unit. The goal for the day is the naval harbor at Olpenitz.

The weather and the current pose no difficulties. Nonetheless, it is necessary to observe numerous traffic rules. Along the canal, passing channels have been set up at regular intervals. All ships are classified in six traffic groups. "Ships that belong to a lower traffic class have to get out of the way of those with higher ratings," Wersig explains. "This is indicated with light signals. Besides that, I have continuous radio contact with the traffic control station in Kiel."

Before they are allowed to serve on the command bridge of a ferry, the ferry masters have to pass numerous training programs. They not only have to know the navigation regulations for both ocean shipping and inland waterways, but they also have to earn a sailing license, a radio operator's license from the Federal Navy, and an open-water canal navigator's license.

The formation reaches Kiel-Holtenau around midday. Everything has gone smoothly and they are on schedule. Now the ferries face their first big performance test. Hardly have they put the harbor of Holtenau behind them when the Baltic decides to kick up some foul weather. A stiff breeze picks up and

high waves break on the pontoons, frequently washing over Schottel-operator Peter Hennings. He and his comrades are wet to the skin in no time.

The clumsy boats put up a great deal of resistance to wind and wave. "The ferry can't react very fast in this kind of situation," explains Private First Class Hennings, one of the most experienced crew members on board, "so I have to let up on the gas so that she isn't pushed off to the side."

In a difficult situation like this or when maneuvering through narrows and under bridges, the ferry master plays the deciding role. He coordinates both motors, dictating direction and speed. "He gives us numbers," Henning explains. They refer either to motor output or drive direction. 3, 6, 9 and 12 o'clock stand for the four directions. If the ferry is supposed to move straight forward, then both motors work parallel to one another.

"If the motors aren't synchronized, we sometimes run into things," Hennings adds. "There've been times we've had holes this big in a pontoon." He gestures with both arms to show the size of these holes. "But if I work in ferry traffic for a longer period of time, I'll gradually know the numbers by heart so that I could get through without instructions."

"I like driving motorboats better because then I'm driving myself without getting instructions all the time," admits engineer Thomas Stutzki, citing the only change he has had to get used to since he left the motorboat school for the ferry, because both types of boats are equipped with the same propulsion systems.

For Engineer Frank Bals, ferry crossings are a welcome change from his regular duties. Otherwise he changes damaged pontoons, lubricates anchor winches, and services the Schottel motors.

In the meantime the ferries have crossed Eckernförder Bay. At times there was no longer any sight contact with the shore. The ferries are tanked up and then serviced in the naval harbor at Olpenitz. It's the end of a long day. They sleep in the trucks. The second stage of the trip to Schleswig is planned for early the next morning.

On the Schlei, a long fjord extending deep inland as far as Schleswig, it is necessary to pass three major obstacles: the swinging bridge in Kappel, the drawbridge in Lindaunis, and the Stexwiger narrows just before Schleswig. We pass the bridges without incident, with half a meter clearance on either side of the ferry. Carefully, with the motors throttled, the crews chug their ferries through. Engineers stand with poles ready to push the boats away from the edge if necessary.

However, at the Stexwiger Narrows, one of the ferries runs aground on a sand bar. Fortunately it is able to free itself on its own power without damaging the propulsion system.

Once we reach our goal, there's no chance to think about calling it a day. One of the ferries is supposed to stay in Schleswig, and another one, which has been here for a while for training purposes, is supposed to be taken back to Rendsburg. One propulsion unit has to be changed because a defective seal is letting in water.

The return trip also proceeds without any problems. With the advantage of a strong tail wind, we make the stretch across the Baltic from Openitz to Kiel in three hours and 55 minutes. Two days later the ferries reenter the harbor at Lehmbek.

All the problems we managed to elude during the crossing snowball all at once at the other end of the North Sea-Baltic Sea Canal. Here in the public harbor at Brunsbüttel-Ostermoor one crew has a special assignment to carry out.

The American roll-on-roll-off ship American Eagle is expected in conjunction with the NATO exercise Bold Guard. It is supposed to land tanks and other military equipment for the US Army. The giant ocean-going ship has too deep a draft to come close enough to the shore to make the landing using its own ramp, so the 6th Company is supposed to provide the connection with a ferry.

The engineers in Lehmbek have put together a floating bridge out of pontoons to serve as a support surface for the ramp and have pushed it through the canal to Brunsbüttel with a motorboat. Private First Class Detlef Krumbeck reported that at this point it was firmly linked up with the ferry that had been sent over.

The ship comes in and the ramp is slowly lowered. But it turns out to be too heavy: the floating bridge is pushed down a good bit into the water. The Americans have second thoughts about letting their heavy tanks roll out onto the unsafe bridge.

For Captain Rupppenkamp this means that the understructure of the floating bridge has to be reinforced right here in the dark. The crews have just returned back to Lehmbek from their ferry crossing and are looking forward to going home, but they have to stay on duty. The necessary pontoons are loaded on trucks and transported to Brunsbüttel.

The engineers start to work. After two and a half hours of hard labor the floating bridge is ready. Everyone waits with baited breath to see what is going to happen. Whoopie! Their night's work hold up under the load.

Captain Ruppelkamp had already predicted the results of this eventful week when we shared a beer earlier: "When the chips are down, then my men show their stuff. And I believe they are proud of their company." And so they should be.

THE 6TH COMPANY OF FLOATING BRIDGE BATTALION 660

Stationed at the Schleswig Kaserne when off duty, the company has a peace-time strength of only 100 soldiers. The battalion is under the supervision of Combat Support Command 41. Only one of its twelve SE (street/railway vehicle) ferries, which make up two squads, is stationed here. The other eleven are on the North Sea-Baltic Sea Canal, where the company is actually deployed.

In peace time Squad # 2 is made up entirely of recruits in basic engineer training. Consequently Squad # 1 is responsible for maintaining and servicing all the ferries.

A ferry is 20 meters long, 39 meters wide when the ramps are stretched clear out, and floats on 30 pontoons. Its empty weight is 130 metric tons. It can transport up to 100 metric tons of payload or two Leopard 2 tanks. It is propelled by one forward port motor and one aft on the starboard side. Each motor puts out 200 hp at 2,000 rpm, to produce speeds of ten to twelve kilometers per hour.

In addition to attending motor and ferry boat school, standard duty in the company includes maintaining the ferries. It is the goal of any ferry crossing exercise to familiarize the soldiers with the risks and dangers associated with navigating the canal, the Schlei, and the Baltic. Besides this, ferry crews and motorboat drivers are trained on their instruments during difficult weather conditions and for maneuvering in tight places.

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VALIDITY OF CURRENT WEAPONS, STRATEGIES EXAMINED

Paris DEFENSE NATIONALE in French Jan 87 pp 41-54

[Article by General Maurice Faivre of the Reserve Corps; first paragraph is DEFENSE NATIONALE introduction]

[Text] Two articles by General Maurice Faivre of the Reserve Corps, published in this magazine in August and October 1984, took stock of "alternative defense" strategies. In the past 2 years, ideas have become more refined and stands have been expressed at the same time that technologies and official doctrines have been evolving. It is time to assess and reflect upon the changes. While intentionally comparing official alternatives with others that are more original, if not marginal, the author does not claim to be expressing definitive truths in a period when everything is changing. His intention, rather, is to provoke debate and seek points of agreement.

"A substitute solution" is the meaning--challenged by dictionaries--of the Franglais term "alternative." As far as defense is concerned, what it refers to is the replacement of doctrines or even strategies that are considered ineffective, unsuitable, or dangerous--namely, NATO's doctrine (flexible response and forward battle) or that of France (countervalue deterrence, prestrategic warning, and solidarity within the Alliance). That will for change is not exclusive to a few intellectual or military circles: it is sometimes expressed by civilian and military officials. The media have seized upon the subject to the point that there is reason to wonder whether an overinformed public is not in fact being mischievously or unconsciously confused. Since deterrence is a battle of ideas, that is one of the rules of the game. In the West, to borrow the excellent formulas used by Cl. Le Borgne and L. Poirier, violence operates more through its expressive strength and as a media event (terrorism, hostages, and pacifism) or the potential it presents (nuclear winter, the disarming strike, the steamroller, and technological breakthroughs) than it does through its physical effects.

Criticisms of the existing systems sustain a whole field of literature ranging from Brossolet to Dubroca, but as J. Laurent has shown in connection with Cockburn's "Soviet Threat" (Footnote 1) (DEFENSE NATIONALE, March 1985), totting up weaknesses or lags results in concealment of the factors that make for strength in the opposing systems. No human organization is without flaws.

At what stage of their withering do sick trees destroy the forest? Making an objective evaluation of threats and responses to them is a difficult exercise.

Questions About Nuclear Weapons

The role of nuclear weapons, both strategic and tactical, is at the center of debate by the new theorists, whether they come down on the side of rejecting those weapons, hesitate concerning their possible use, or display "inflexible" determination. The nuclear fact is so unavoidable, to use Admiral Lacoste's expression, that the most contradictory feelings toward it are expressed: fear of the military and civilian use of nuclear energy, fear of a limited but destructive conflict, doubts about American (or French) determination, failure to understand the "atomic Maginot Line," fear that the balanced arsenals will "deter from deterring" and encourage a blitzkrieg, nonperception of a direct threat, condemnation of both imperialisms, doubts about the effectiveness of weapon systems, and rejection of militarism and provocative tensions. Is it not true that all those attitudes reflect an erosion of nuclear deterrence in the public mind? They explain to some extent the greater attention being paid to conventional means of defense on both the American and the Soviet side. And they encourage innovative ideas that can be put in three families: resistance without weapons (nonviolence), in-depth defense without fighting ("techno-guerrilla warfare"), and deterrence based on neutron weapons ("Euroshima").

Many debates have been carried on concerning those ideas, but before commenting on them, it seems necessary to situate them from the standpoint of the official Soviet and American alternatives.

Soviet Turnaround?

Soviet military doctrine has two parts. The first is sociopolitical and is practically immutable; the second is military-technical and is in a constant state of development. In keeping with Engels' teaching, it is arms technology which controls the always cautious evolution of military doctrine.

Within the framework of overall strategy, the party-state directs military strategy, which is aimed at achieving twofold capability: that of ensuring absolute defense of the territory, including space defense, and that of carrying out a victorious offensive using all means of combat. On that subject of victorious warfare, there has been a debate in the ruling circles, as can be seen by the writings of Ogarkov and the statements of Brezhnev and his successors. Western experts are pondering these changes. (Footnote 2) (M. Tatu, J. Laurent, J.C. Romer, H. Paris, C.N. Donnelly, P.H. Vigor, J. Hines, General Schulze, and others) Let us summarize their conclusions, which confirm what attentive observation of the progress achieved in the matter of conventional forces has been hinting at for the past 10 years or so.

In the 1960's, the Sokolovskiy doctrine had favored the massive use of nuclear forces, and the air and ground forces had been organized to fit that option. Ten years later, the possibility of beginning a conflict without a nuclear strike was being mentioned, and the fire capability of the conventional forces

was being doubled. Since the beginning of the 1980's, the possibility of a war without nuclear weapons has been admitted, and force structures are being adapted to that type of action. (Footnote 3) (The Chernobyl and nuclear submarine accidents reinforce doubts concerning Soviet mastery of the atom) Gorbachev claims that no nuclear victory is possible, and in that case, nuclear warfare would no longer be the continuation of state policy. It is true that intercontinental and regional missiles retain their function of terrorizing public opinion and governments, but the plan for dismantling arsenals (15 January 1986) makes it possible to downgrade nuclear deterrence and favors a policy of intimidation through conventional superiority or one aimed at victory without war.

That doctrinal turnaround is reflected at the operational level by the emphasis being placed on surprise and on preparation for conventional combat. Nuclear weapons are not being abandoned: their use is still contemplated as a response to a U.S. strike or on a preemptive basis to prevent an imminent strike. But it is felt that the outcome can be decided militarily by in-depth air and ground penetration, the skirting of centers of resistance with heliborne operations, and the use of smart weapons or possibly chemical weapons. That would make it possible to forestall the U.S. nuclear decision and even the sending of Allied divisions into the gap. The Soviet analysis of the time it would take to deploy NORTHAG [Northern Army Group] corps confirms that last-named conclusion.

Briefly stated, that conventional alternative in Soviet doctrine does not rule out the possibility of presenting threats in other theaters--particularly the maritime and media fronts. The nuclear standoff resulting from relative balance in the number of launchers also favors indirect action. This change certainly does not mean that the Soviets contemplate war as a solution to their domestic difficulties. On the contrary, their diplomatic attitude seems to show that they are seeking some degree of detente. But we must agree with Donnelly that a lightning war without the use of nuclear weapons is now the model their strategists prefer. The statement that "war is dead in the West, and East-West defense is blocked by deterrence" no longer corresponds to Soviet reality as it exists in 1986.

U.S. Alternatives

The return to conventional forces is also observable in the new U.S. doctrines: SDI and the Rogers Plan. Those doctrines also originate in the fear of nuclear war, and it seems that they can be regarded as alternatives in that their implementation relies on future technological progress and will occur in the medium term at best. It is necessary to stress the time spread involved and the consequences those alternatives will have as far as Europe's defense is concerned.

General Rogers' FOFA concept, which must be differentiated from the AirLand Battle doctrine--a doctrine unacceptable to the Europeans (Footnote 4) (West German Army 1985 White Paper, paragraph 61)--is aimed at interdicting the advance of enemy second-echelon forces. This compartmentalization of the battlefield is to be achieved by conventional fire, whereas previously it was

to have been provided by nuclear fire. But while the forward battle concept has not been modified, the Rogers Plan seems to disregard the Soviet ability to carry out a lightning war, which is the most dangerous hypothesis. Lastly, it poses problems in the locating of ground targets and in computerized management of the battlefield, and those problems are far from being solved. Its adoption--not without reservations--by NATO does not guarantee a strengthening of European defense in the coming decade.

SDI is intended to render nuclear deterrence inoperative by destroying enemy nuclear missiles in flight. While that objective seems out of reach for the next few decades, terminal point defense of the launch sites is entirely possible, and this is going to modify the data on strategic equilibrium, particularly in Europe, where the hypothesis of the surgical strike--announced by General Gallois before it was achievable--may lose all credibility if the Europeans decide to adopt an enlarged air defense. (Footnote 5) (Designated EDI (European Defensive Initiative) by supporters of the "High Frontier") U.S. Patriot missiles already have antimissile capability. As was emphasized by the polytechnicians in the Polytechnic School Defense Group, the SDI research program cannot fail to have considerable repercussions in all areas of arms technology. Its strategic and diplomatic consequences are much debated, and it is understandable that some of those consequences are of a nature to disturb Europeans.

It is in keeping with American tradition to seek a means through technical progress of saving the lives of combatants. The Americans probably need reminding that that approach is expensive, lengthy, and not always successful. But discussion among allies seems preferable to out-and-out rejection and to approval of the Soviet theses.

Civilian Deterrence

"Civilian Deterrence" (Footnote 6) (By C. Mellon, J.M. Muller, and J. Semelin; see the bibliography in DEFENSE NATIONALE, February 1986) is the title of a book by the three French apostles of nonviolence, who were officially invited to express their point of view. The contract covering their research specified that unarmed defense must be considered an adjunct of French deterrence, not an alternative. For that matter, the authors admitted that public opinion was not ready for the idea of defense without weapons, since that idea could not become self-evident until after a transitional so-called transarmament period. They therefore consider various possibilities: civilian resistance in addition to armed resistance if the country is occupied and civilian defense considered as a course of action following military defeat or as an option preferable to military resistance if deterrence fails. They conclude that civilian deterrence will have its own credibility if the population is motivated and united around a determined government: the ideological, economic, and political cost of an invasion would be greater than the benefits an aggressor could expect. They therefore feel that genuine operational complementarity between the military and nonviolent components of resistance can be established and that those components will reinforce each other, provided that they are separated geographically. While saying that steps should be taken to ensure that the country is provided with supplies and

electricity, they recommend taking every step likely to reduce the economic advantages that an occupier might gain from the country--through discreet sabotage, working but not cooperating, partial or selective strikes, and resistance in government departments.

There is in those proposals an interesting contribution as regards not only the population's spirit of defense but also the spirit to resist an occupier. When questioned by the authors, political, military, and religious figures appreciated the positive character and moder. 'on of what had been proposed and approved the complementarity of those two kinds of deterrence. (Footnote 7) ("Nonviolent Alternative," April 1986) They feel that defense without weapons should make it possible to educate the citizens and to develop their civic courage, sense of responsibility, and attachment to the values of democracy. Also interesting is the suggestion that the duties of no surrender and no collaboration be written into the Constitution.

The theory's deterrent value is challenged, however, by many commentators. How effective would resistance be against an occupier of the totalitarian type, who would not be bothered by moral scruples? Our consumer society is not prepared for the sacrifices involved in disobeying the orders of such an enemy, who would use minorities within the country that completely support his ideology. In those conditions, announcing nonviolence ahead of time might actually encourage an aggressor. As a poststrategic weapon, civilian deterrence does not present the invader with enough risk to make him give up. For that matter, must we envision the failure of deterrence? Does not preparing for resistance mean accepting defeat and weakening the credibility of overall deterrence? The answer to that question is not favorable in all countries.

Defense without weapons gives rise to other objections. Since it requires unanimous support by the population for the institutions and social organization of the state, it may result in a political regime close to totalitarianism. It appears, however, that pluralist democracies are safe from that pitfall. The drawback, on the other hand, is that the political motivation and subversive methods it inculcates in its militants may be used in peacetime in an attempt to destabilize society. One can no doubt understand the criticism directed by the nonviolent at the "monarchical" nature of the nuclear decision, but the spirit of defense they advocate often seems to constitute a rejection of the authority of the state. It might also be asked whether economic noncooperation would not be more effective if it were organized not by the rank and file but by officials in key sectors, who are capable of putting the production system into a kind of hibernation.

Despite the good will of the participants in this debate, it seems to us that the debate is vitiated by a basic misunderstanding. Those responsible for national defense hope to reinforce the credibility of overall deterrence by increasing consensus in favor of their policy. The question thus raised is that of compatibility between French deterrence, which is provided by nuclear and conventional weapons, and a civilian deterrence whose supporters reject nuclear weapons and military service. It is not certain that civilian deterrence strengthens the other kind. The book in question, which was

published in 1985, remains relevant as far as theoretical reflection is concerned, but in practice, one cannot imagine a responsible state entrusting the task of educating people in the spirit of defense to the nonviolent movement. This has to be said without polemics and out of a concern to keep dialogue alive. One of the purposes of this joint approach would be to reflect on that problem of compatibility between violence held in check (deterrence) and violence rejected.

"Techno-Guerrilla Warfare"

Brossolet's "nonbattle," which turned into "techno-guerrilla warfare" when it crossed the Rhine, still has a favorable audience in intellectual and religious circles. (Footnote 8) ("Peace by Other Means," February 1985) There is no need to redevelop Afheldt's theory, which is based on a nonprovocative attitude with no targets or offensive capability, a people's in-depth defense relying on light modules and artillery networks, and denuclearization of the German theater. Afheldt has further refined his initial model by adding the latest technology: antitank and antiaircraft missiles, multiple rocket launchers, and microelectronic guidance.

That alternative has been taken very seriously in the FRG. Viewed with interest by Generals Altenburg and Kielmannsegg as a way of making up for the declining manpower pool, the idea of establishing militias seems to have been accepted by the Army chief of staff, but only for local guard duties. Also being considered is the establishment of rifle regiments to be in charge of wooded and urban areas. During the winter of 1983-1984, the West German Parliament's Defense Committee examined alternatives suggested by 26 experts. Their proposals were compared with three unchallengeable ("unverzichtbar") criteria: the first objective of the FRG's security policy must be to prevent war; defense must be viewed only within the framework of the Alliance; and it must be forward defense ("Vorneverteidigung") that will limit damage and make it possible to end a conflict as quickly as possible. At the conclusion of that examination, it turned out that the alternatives did not satisfy those criteria. (Footnote 9) (1985 White Paper, paragraphs 184 to 189)

The fact is that in-depth defense transforms the FRG into a battlefield. Moreover, an exclusively defensive ("nichtangriffsfaehig") structure eliminates all defensive capability and reduces the risks facing an attacker, who is then sure of holding on to what he has gained. Besides, it is not correct to say that NATO's deployment is provocative: its forces are not at all adapted to a strategic offensive in Central Europe. Lastly, abandoning nuclear deterrence would authorize the enemy to use his conventional superiority, and a pledge of no first use or the establishment of a denuclearized zone would formalize the separation of Europe from the United States. Those arguments convinced the Federal Government not to change anything in the Allied strategy as long as a genuine alternative guaranteeing the prevention of war had not been found.

In France, Afheldt's latest book (Footnote 10) ("For a Nonsuicidal Defense in Europe," La Decouverte, 1985) was published just as Alain Joxe was putting forward his "principles of civic deterrence." (Footnote 11) (CAHIER D'ETUDES

STRATEGIQUES, No 6, CIRPES, 1985) In his book, Afheldt gives as an example the Yugoslav system with its techno-guerrilla resistance rather than the Swiss defense system, which he reproaches for its principle of grouped and mechanized combat. He backs his theory with a scholarly demonstration analyzing the concept of deterrence by semiotics and the plan for "uncentered" organization by a combinatorial analysis involving lattices, labyrinths, and automatons. As for General Copel, he has expanded his ideas on territorial and civil defense in the European theater. (Footnote 12) (He is also hoping for a European effort (a military Eureka program) in the areas of long-range interdiction missiles, observation satellites, and space and air defense)

In the preface to Afheldt's book, Jean Klein and General Buis approve of the political and psychological significance of a nonprovocative and relatively cheap system, but they feel that purely conventional deployment would be an invitation to aggression. The former notes that this model is incompatible with the FRG's international commitments and that it would be ineffective in the face of massed armor backed by powerful artillery and air support. The latter feels that hand-to-hand fighting requires overtrained elite troops rather than territorial militia fighters.

The tactical capability of techno-guerrilla fighting against a Soviet armored offensive indeed remains to be demonstrated. The Afheldt brothers say they have conducted conclusive simulations, but they have their motorized rifle divisions (MRD's) advancing over a 26-kilometer front. But in the absence of a nuclear threat, an attacking MRD concentrates its forces over a front of 5 to 10 kilometers. J.B. Margeride has shown through mathematical calculations that "large battalions" always win out over "small packages." To take one of the examples quoted, an antitank missile facing nine tanks has a 60-percent chance of destroying one of them and a 98-percent chance of being destroyed. And as Ardant du Picq said, "a man is capable of only a given quantity of terror." So it would take particularly well-trained gunners to dare fire a missile at armor that was advancing in great numbers. Margeride's calculations are valid only in a homogeneous environment and in conditions of qualitative parity which are rarely achieved. That is why lab and field experiments are necessary: they might shed light on the debate surrounding the vulnerability of armor in response to those who have been saying since the Yom Kippur War that tanks are doomed by new weapons: precision-guided munitions and ground- and air-launched missiles. (Footnote 13) (No country, not even in the zones of conflict, has yet scrapped its tanks. General Schmitt said in Fermont on 14 July 1986: "The tank remains the weapon of power, tactical mobility, and endurance on the battlefield." But some armies--in Austria, Finland, and Albania, for example--have only a small number of tanks)

Despite his subtle arguments concerning infranuclear deterrence, the typology of militias, and the sociology of bearing arms, Alain Joxe does no better than Afheldt or Copel when it comes to demonstrating the effectiveness of echeloned modular defense in depth. Some of his assumptions concerning U.S. concepts of limited nuclear war or offensive combat are debatable (the Rogers Plan differs from AirLand Battle). His idea for "composite" deterrence is interesting--it reminds one of General Beaufre's complementarity of levels and the overlapping of European strategies as expressed by General Fricaud-Chagnaud and D. David--

but his "uncentered" deployment is a juxtaposition of forces in which the only cohesive factor is the will of the citizens to participate in their defense. That is something, provided that it is real, as it is in the case of the Swiss, Albanians, Finns, or Israelis. But neither the Europeans in NATO nor the Yugoslavs seem to be that motivated.

The reference to the Yugoslav model does not seem relevant because we are witnessing a mothballing of the concept of "generalized people's defense" (GPD). Tito seems as dead as Sokolovskiy! In a first phase, he had added "social self-protection" to the GPD, because domestic tensions were considered more dangerous than the external enemy. That trend was confirmed after the marshal's death by the distribution of individual weapons to trusted men scattered around the territory. In a second phase, emphasis was placed on the militarization of defense at the expense of its socialization. The writings of Admiral Mamula and his staff and the budgetary effort to modernize weapons indicate that priority is now going to the Regular Army (YPA [Yugoslav People's Army]), which is regarded as being the driving force for national unity within the federation, the spearhead of battle on the frontiers, and the guiding element in combined in-depth operations. The third phase--combat by partisans--is now no more than an eventuality which no one wants to see develop. The reasons for this change, which can be compared to the Chinese modernization, obviously have to do with the difficulties of unitary policy and the state of mind in Yugoslav society. It can also be asked whether the revelations by revisionist writers concerning Tito's war of resistance may not have tarnished the romantic image of partisan fighting. (Footnote 14) (Milovan Djilas, Miso Lekovic, Veseliu Duretic, and Kopinic)

The fact remains that modular defense is an appealing concept whose implementation should have effective results in compartmentalized or urban areas. It also has the great merit of remobilizing the citizens and getting them involved in defense of the territory and of national values. Comparable methods are advocated by the Austrians and Finns. Differentiated use of the terrain as advocated by Loeser or Spannochi seems conceivable, and the West Germans are interested. As we will see later, Gen Buis is making suggestions along the same lines. Colonel Doly and Lieutenant Colonel Philippot recently put forward the idea of a territorial defense based entirely on organizing the Gendarmerie on a grid pattern. (Footnote 15) (DEFENSE NATIONALE, October 1986) Thinking with respect to the DOT [Territorial Defense Force] may go even further and contemplate a genuine regionalization of the country's defense within structures which would combine territorial defense and civil protection and in which women and the nonviolent would have a place.

Variations in Battle

Deterrence through preparations for conventional battle under a nuclear threat is one component of NATO's strategic triad: it comprises direct forward defense, a deferred ("no early first use") and initially selective nuclear response, and, since 1984, second-echelon attacks. It favors the hypothesis of a surprise attack with light reinforcements by the Soviets (FRG White Paper). But the differences between the concepts governing its implementation by the various participants are more than nuances.

The French concept is that of a short battle under the threat of prompt use of nuclear weapons (final warning), with air and ground forces stepping in as the second echelon if the government so decides, preceded perhaps by the Rapid Action Force (FAR). After long rejecting combat, the Socialist Party has rallied in support of conventional deterrence, the strengthening of which it considers urgent. While stating that European strategic spaces form a continuum, it comes down in favor of closer solidarity with the FRG, which will be consulted concerning the use of tactical nuclear weapons. It even envisions nuclear cooperation with Great Britain and French participation in "regional" deterrence--although without explicit guarantees or any "two-key" provision, it is true. (Footnote 16) (The Socialist Party's statement dated 2 July 1985 does not seem to have been approved, and its distribution was very limited) The UDF has confirmed its choice of almost automatic entry into the battle with all forces combined and of "inflexible" use of tactical nuclear weapons, preferably neutron weapons. That deterrence on the "forward line," for which Chirac has stated his approval from time to time, is combined with the establishment of a European pillar within the Alliance. (Footnote 17) ("Straightening out France's Defense," (CPIP, 1986), which high-ranking military figures in the Reserve Corps are said to have helped write) In "The Future of Warfare," P. Lellouche adds to those ideas the proposal that the French force in the FRG be redeployed, with an army corps in the "gap."

Little attention has been paid to the concept of use that was adopted by the British in 1983. Noting that redeployment of the Dutch, Belgian, and British divisions required from 6 to 8 days, the commander of NORTHAG contemplates conducting a battle aimed at "slowly applying the brakes" to the invader over a depth of from 70 to 80 kilometers. Leaving centers of resistance in the enemy's rear, he would then counterattack using the large units that had been held back and the reinforcements from overseas. (Footnote 18) (Article by General Bagnall, ComNorthAG, in RUSI JOURNAL, September 1984. This concept was studied during the "Eternal Triangle" exercise in 1983) Apparently, this concept no longer meets the West German requirement for forward defense in all particulars. There are also differences in use between the Americans, who want to destroy the enemy by means of aggressive mobile defense, and the West Germans, who advocate a defense closer to the frontier and the recovery of lost terrain. Those differences do not exclude a convergence of efforts aimed at the interoperability of forces and the in-depth reinforcement of reserves. (Footnote 19) (Statement by Gen Rogers in RUSI JOURNAL, September 1986)

The differences noted might encourage a search for more effective defense structures. In the above-mentioned article, Gen Buis suggested discontinuous and in-depth deployment, with modules to be organized on a grid pattern and entrusted to active troops in the forward area, reservists in the rear, and smaller armored reserves. Under that concept, the French forces and their Allied reinforcements would be given roles corresponding to what they are able to accomplish in time.

All those variations in conventional defense under a nuclear threat reveal the possible options between forward defense and defense in depth, an early or late nuclear threat, and American predominance and a European pillar. On none of those points are West German and French opinions moving in the same

direction. And nothing seems more important than the preservation of harmony between our two peoples.

The examination that we have just made therefore leads us to enunciate the same thoughts that we expressed during the assessment suggested in 1984. On the favorable side is the concern, as expressed in the various alternatives, to defend the national territory along with the values of democracy and human rights. Perhaps it would be possible to continue dialogue aimed at defining precisely what deserves to be defended by the French and the Europeans. Beyond the cleavages existing between those supporting a national identity rooted in history and in an assimilating culture and those advocating openness, universalism, and a diverse culture, it would no doubt be possible to find a common denominator as the basis for civic education and support for Europe.

In the face of a strategy which is total in its objectives and its means of action, the response can only be an overall deterrence which rejects exclusive systems such as the all-nuclear approach, the all-conventional approach, or the nonviolent alternative. Threats and intimidation occur at every level of deterrence and action--from intercontinental missiles to the manipulation of public opinion. It is therefore at those same levels that the free nations must be armed and must cooperate, with the weaknesses of some being offset by the strengths of others, to prevent evasions and promote the resumption of negotiation. That complementarity of strategies, formulated by Gen Beaufre and taken up by others (Footnote 20) (Gen Fricaud-Chagnaud and D. David, "Christopher Columbus' Warheads," STRATEGIQUE, No 25, 1/1985), can find no better framework than that provided by Europe, although it is not yet possible to determine the structures within which it will take shape. Reactivation of the WEU, the Single Act of the EEC (Footnote 21) (Adopted in Luxembourg on 3 December 1985, the Single Act marks the European Council's first recognition of the security issue), and the Mariani Report favoring a defense community are all small steps in that direction. Would that not be the best of the alternatives?

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SCALE, TEMPO OF ARMED FORCES PROCUREMENT 1987-1996 OUTLINED

The Hague LEGERKOERIER in Dutch Jan 87 pp 11-13

[Article by M. Herben: "Adjustments Needed By Reason of Diminished Growth: Defense Plan 1987-1996 Adapted"]

[Text] Last month the minister of defense, Dr W.F. van Eekelen, informed the parliament by letter of changes in the 1984 defense plan and the 1987 defense budget. These adjustments are needed because defense expenditures since 1984 have increased less than was projected. In the 1984 defense plan, a real annual growth of three percent was anticipated for 1987 and the years to follow. In the government settlement, however, it was agreed to limit the annual growth to two percent during this cabinet term. "A growth of two percent is needed in order to enable the government to implement the plans currently being proposed. A lower growth percentage might lead either to the abandonment of certain tasks or to an increase in operational risks in carrying out the now recommended ones," writes the minister.

For the Royal Constabulary and the Central Organization, the adjustments in the 1987-1996 defense plan have no essential consequences. The financial consequences and the schedule for implementing a new personnel policy for the military have yet to be established. As soon as possible, further information on this matter will follow. According to the minister, the defense plan offers possibilities for innovations in the personnel policy as early as 1987. The currently projected adaptations have a bearing on the materiel projects. Below we present an overview of the revised materiel plans for each branch of the armed services.

Six Submarines

Not four but six submarines of the Walrus-class will be built. The original plan to build two smaller submarines has been shelved. With a view toward standardization, it was decided to build vessels of a single class. In this way the risks inherent in new designs would be eliminated. Up to and including 1991, the Royal Navy will have the use of five submarines, because there was evidence of delays and a fire that occurred while the Walrus was being built. The projected number of 22 frigates will not be reached by 1990, but only in 1995. Between 1990 and 1995, eight multi-purpose frigates will be put into service, equipped with the "Tactical towed array system" (Tactas), a towed sonar device.

Four frigates will be placed "on reserve," which in broad terms means that the crew is being reduced to one-third of its operational strength, and that the exploitation costs will be reduced as well. The ships may be used for training missions, however. The Naval Air Force, for its part, has definitively given up the idea of purchasing two extra Orion patrol aircraft. The current force of 13 Orions will be maintained and optimally utilized by expanding their crews to twenty. The new ship-based helicopters, with more capabilities than the present Lynx, will not be available before 1998. A modification program to extend the life expectancy of the Lynx to the year 2000 is in preparation. By improving the engines, the frequency of usage will also be increased.

Amphibian

In the second half of the plan period, a ship for amphibian warfare will be purchased. Plans for a third "ordinary" supply ship are therefore being put on the shelf. According to expectations, the last of the mine-detector ships of the Alkmaar class will be put into service at the beginning of 1989. Ten of these ships will be operational, while the remaining five will be held in reserve or will undergo a major overhaul. The 11 minesweepers of the Dokkum class will be maintained for three more years and will be replaced by 10 minesweepers in the nineties. These projects manifest an attempt to achieve international cooperation, including cooperation with Belgium.

The budget for the Royal Navy this year amounts to 3,031 million guilders, and it will rise to about 2.8 billion a year by the years 1988-1990

Small Arms

According to the 1984 defense plan, armored infantry battalions have to be equipped with vehicles of the YPR class. There will, however, be a delay of one and one-half years in their production. For the YPR-765, thermal-imaging apparatus has been ordered installed. For the Leopard tank, this apparatus is to be ordered sometime during 1987. A sum of 755 million guilders has been set aside for improvements on this tank and for the extension of its life expectancy. A report on this matter will be presented to the House this spring.

The PRTL (Armored Caterpillar Anti-Aircraft Tanks) will be improved during the first half of the plan period. Plans call for the purchase of improved Stingers for air defense two years later, that is in 1990. The present machine guns and small arms will be replaced from five to eight years later. We remind you that in the 1984 defense plan, an amount of 293 million guilders was appropriated for this purpose during the period 1989-1993. Thus it appears that the FAL and the MAG, which we know very well, are likely to last until the year 2000. Meanwhile, the MLRS rocket-launcher has been ordered, three years earlier than was anticipated; in this connection, medium-range target-tracking equipment has been rush-ordered. The phasing-in of an automatized pre-support information-processing system will begin in 1990. The improvement programs for the M-109 and M-110 mechanized guns will be implemented one to two years later, that is, after 1990-1991. Starting with the mid-nineties, target-seeking artillery munitions will be purchased, enabling the MLRS to combat tanks as well. The projected supply of artillery munitions will probably be fully completed two years sooner.

The new combat uniforms will become available only in the second half of the plan period, but if possible, hand-guards, sleeping-bags and combat boots will be introduced earlier. The purchase of transport helicopters is not possible in this plan period. The budget of the Royal Land Forces is estimated at 5,427 million guilders in 1987 and will gradually increase to 6,031 million by 1990.

Nine F-16 Squadrons

The 1984 defense plan indicated that the operational fighting strength of 162 F-16s would be concentrated into eight squadrons. Then, too, by reason of the increasing offensive power of the aircraft and the conventional tactical ballistic rockets of the Warsaw Pact nations, the emphasis must be placed on decreasing their vulnerability. In that connection, it is important that the aircraft be distributed over more squadrons and airfields. For that matter, the intended savings have already been achieved in large measure through the amalgamation of the logistic support and the staffs of the Eindhoven and Gilze-Rijen air bases. Therefore Minister Van Eekelen has decided to maintain the present structure--nine squadrons on five airfields. As for the ground-to-air defensive weapons, a study is now being carried out as a consequence of modifications in the NATO plans for integrated air defense. The plans will most likely be altered by reason of this study.

In the defense budget for 1987, it has already been revealed that the air defense of the northern Netherlands will be carried out through the use of pursuit planes and not of Hawk rockets that will come back from West Germany, where in coming years they are to be replaced by the Patriot. Also, for the further reinforcement of the air defense, the minister has expressed a preference for the purchase of extra Patriots. As is well known, on 1 November 1985, not only was the decision made to locate cruise missiles in our country, but joined to it was the abandonment of nuclear undertakings, including the F-16 squadrons at Volkel. Both government parties were in agreement then that the conventional air defense should be improved at the same time. This amounts to a total of 300 to 400 million guilders that will be added as an extra to the defense budget during the years in which this is relevant. When and how the air defense will be improved is yet to be determined in the council of ministers.

Phasing Out the NF-5

In his letter, the minister intimates that the F-16 is not so readily available as was anticipated, because of losses during the time of peace and the necessary modification programs. In this connection, the NF-5 fighter-bombers will remain in service for about three more years. This means that after 1992, another 31 NF-5 aircraft will be discontinued. This year 15 have already been phased out. And both in 1988 and in 1989, another 21 will go. Studies are being conducted to determine whether the NF-5 can still be used by one of the allies. Export of these aircraft will be kept within the limits of the arms-control policy, the terms of which will be taken into account.

The development of the NATO "Air Command and Control System" is four years behind. Originally it was to be in place about 1990. Because there is an urgent

need for the existing system of air traffic security control to be replaced, the decision was taken to purchase a new Pharos system for the military air traffic controllers at Nieuw-Milligen. Later this year the Air Force will begin a series of low flight training exercises in Canada. To conclude: The Air Force budget--2,609 million guilders for 1987--will increase to 2,950 guilders in 1990.

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SURVEY OF ALTERNATIVE ENERGY SOURCES

Cheap Alternative Energy Said 'Imperative'

Ankara YANKI in Turkish 11-17 Aug 86 pp 40-41

[Text] Until the last few years no one thought fossil fuels might run out. But in 72, estimates made in Rome showed the opposite. The report warned that oil was due to run out in 90. Later it turned out that the rumors of oil's demise had been greatly exaggerated. The discrepancy was due to the inadequacies of techniques employed. More realistic assessments later concluded that the world has enough oil to last a further 600 years if we include the oil sands. But the thought that energy sources, plentiful today, might dry up someday (even if initial assessments were wide off the mark) pointed to the need to look for new sources. Quite soon new methods were being used, even if at experimental levels. The solar energy station in Colorado, established as a result of those efforts, is now able to produce and sell electrical energy, however small overall quantities might be.

One of the most significant effects of modern technology has been the replacement of manpower by other sources of energy. Starting in 18th century, machines have been used in textile manufacturing, grain processing and other areas. If we look at the history of energy use it can be seen that one source of energy has been replaced by another. The first energy source, wood, was replaced by coal which, in turn, was replaced by oil. It is arguable what will come next to replace oil. It could be nuclear, solar, or wind energy, or something we don't yet know about. Time and technological developments will tell.

Our Energy Sources

While efforts to find alternative sources of energy are ongoing, it is quite apparent that Turkey is able to produce only 51 percent of its energy needs. The remaining 49 percent has to be imported, and a good part of the budget goes to the importation of energy. Which makes it imperative for Turkey to find cheap, alternative sources.

Oil, coal, and freshwater constitute the main sources of energy in Turkey. Production figures for 85 are as follows: Annual production of crude oil -- 2 million 110 thousand tons; coal production -- 30 billion 993 thousand tons, of which 72 percent is used to produce electrical energy at thermal power stations, 15.2 percent for heating, and 12.8 percent in industry. 30 million 608 thousand kw/hr is derived from freshwater sources. It is clear that these figures are far from meeting Turkey's total energy needs. The only hope seems, at this stage, to be alternative sources of energy. Frequently mentioned new sources are solar, wind, biogas and geothermal. Freshwater sources are presently in use, and will be used in the future.

Plenty of Sun

For Turkey, the most suitable source of new energy is solar, experts say. Located within latitudes labelled 'global sun belt' Turkey is considered lucky in the amount of sun -- length of exposure, intensity -- it receives. Turkey's exposure is 2,640 hours annually. Studies concerning solar energy are undertaken by Electrical Affairs Research Administration (EARA).

Solar energy is produced basically in two ways. The first is what is called the 'sun battery'. This is a system transforming solar into electrical energy. One factor preventing the widespread use of this system is the difficulty of processing single-crystal cilicium which is an expensive substance. As cilicium has to be imported its cost rises further. Despite these drawbacks there are areas where the system is used efficiently. Observation stations situated far away from settlements, radio-TV transmitters placed on high ground are cited as examples.

The second system is the one where hot water is derived from solar energy. As this system is cheaper than the 'sun battery' there is widespread potential for its use in Turkey. There are presently over 50 companies manufacturing solar collectors, working on the hot water principle. The most widespread use is in the south, southwest, and southeast Anatolian regions.

Wind Energy

Studies on wind as a source of energy are also proceeding. These studies are making use of measurements taken by State Meteorological Office for agricultural purposes. It has been determined that Bandirma, Bozcaada, Canakkale, Marmara Islands, Antakya and vicinity are suitable for derivation of wind energy.

Meanwhile, experts say that in rural areas water pumps may be used to generate electrical energy. EARA and Middle East Technical University have been working together since 83 to monitor technological developments in this field, and to adapt technologies to the conditions in Turkey. As a result, a turbine generator system geared to electricity production has been developed. The system consists of generator, tower, electrical control board, and battery. Apart from the turbine all the parts have been manufactured domestically.

Geothermal Energy

Researchers show that Turkey is situated on the 'Alpine tectonic belt' which formed during the break-up of continents, providing an outlet for thermal gases down below. Research in this area is conducted at the Mining Research Institute since 62. These studies have shown that geothermal sources exist in the Aegean region, though in low quantities. This method is used in greenhouse heating and central heating.

Studies concerning biogas, conducted by the Ministry of Village Affairs, Agriculture and Forestry, have been going for some time though there is much more to be done. In short, efforts to find new sources of energy are in experimental stages right now. It is difficult to see a resolution of Turkey's energy problems in the near-term.

Interview with Suheyl Elbir

Ankara YANKI in Turkish 11-17 Aug 86 p 41

[Text] Director General of EARA Seheyl Elbir responded to YANKI'S questions concerning the use of new energy sources in Turkey:

[Question] How can new energy sources help Turkey overcome its present energy bottleneck?

[Answer] When we compare the quantities of new energy sources with those already in use it would be foolhardy to expect a great contribution. Our solar, wind, geothermal and biogas sources are not so large as to preclude any further dependence on oil. We are importing energy on a large scale -- energy being a most important factor in our development. Reducing the energy burden on our economy is a prime objective. Therefore, we regard the new energy sources as quite compatible with our programme as they could make a contribution to our economy.

[Question] At EARA, which energy sources currently interest you most?

[Answer] We are working mostly on solar and wind energy. Apart from these some studies are made on geothermal energy sources. But our main focus has traditionally been freshwater sources.

[Question] Do you have sufficient resources for research and development?

[Answer] Yes, we do have sufficient financial resources. But we don't have sufficient research personnel. Like in most fields there is a shortage of trained personnel in the field of new energy sources.

[Question] Which are the installations that derive their energy from the new sources? And where is your research taking place?

[Answer] There are numerous solar (hot water) collectors in our country. These are mostly in our southern, southwestern, and southeastern regions. There are over 50 firms in Turkey manufacturing flat-surface (hydro) collectors. EARA maintains a power station in Denizli producing 20 MW, which is not much of course. We are engaged in studies geared to different regions of the country.

Our research compound is located in Ankara. But if we can get positive results from our researches we will soon establish a solar energy research centre near Manavgat, Antalya.

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BRIEFS

FIRST ROTOR AT KARAKAYA DAM--Diyarbakir (A.A.)--A ceremony has been held to mark the installation of the Swiss-built giant 700-ton rotor at the first unit of the Karakaya Dam and Hydroelectric Station under construction on the Euphrates River in Cungus District of Diyarbakir Province. The rotor, the heaviest single object ever to be manipulated in Turkey, was lifted into place by two winch operators serving with the 24th Regional Directorate of the State Waterworks Service on a contract basis. Yesterday proved a most exciting time at Karakaya Dam, which is being built by an Italian firm and is destined to be the second largest electricity-generating installation in Turkey. The excitement was due to the realization that the generation of electricity is now only one step away. The rotor to be installed at the first unit was the most important single piece of equipment to produce power. The impounded waters of the Euphrates will be channeled to the station and their pressure will rotate this rotor to general electricity. [Text] [Istanbul DUNYA in Turkish 15 Nov 86 p 7] 13184/13046

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